1 SAN FRANCISCO, CALIFORNIA, DECEMBER 12, 2005 -1:00 P.M. 2. 3 COMMISSIONER PEEVEY: We will now commence the 4 quarterly meeting of the Energy Action Plan group now that 5 Commissioner Brown has joined us and the PUC has a quorum 6 here. 7 I am a little uncomfortable being surrounded on my 8 left and right by Commissioner Desmond and Commissioner Boyd 9 here, and all the way to my left literally and figuratively 10 and in every other way, Commissioner John Geesman. 11 (Laughter) 12 COMMISSIONER PEEVEY: I think Commissioner Bohn will 13 be joining us shortly. I do not anticipate Commissioner 14 Kennedy being here today. 15 And I believe that Sunne Wright McPeak will be 16 joining us, tardy as usual. 17 Commissioner Bohn is just joining us. 18 So let me welcome everyone here, my fellow 19 Commissioners. And here we are at the outset of another 20 quarterly meeting of our energy action group. 21 I would like first to ask if any of the members up 22 here on the dais would like to say anything, beginning with 23 Mr. Desmond. 24 Joe. 25 CHAIRPERSON DESMOND: I will keep these remarks very 26 brief. That is simply to welcome everyone for being here 27 today. We have an agenda covering a number of topics, all of

them important, natural gas pricing in particular, and the

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1 outlook for 2006. I am looking forward to going through the 2. materials here, but we have got a whole day. 3 COMMISSIONER PEEVEY: Anyone else? 4 (No response) 5 COMMISSIONER PEEVEY: If not, why don't we just get 6 right into it. 7 The first thing we are going to do is have an 8 update on the impact of natural gas prices on winter heating. Steve Larson, the CPUC executive director, is going to walk 9 10 us through that with a presentation. 11 Your voice is all fine and recovered? 12 MR. LARSON: Right. 13 COMMISSIONER PEEVEY: Very good. 14 STATEMENT OF MR. LARSON MR. LARSON: Thank you, Mr. President, Chairman, 15 16 members of the Commission. 17 PUC has recently taken steps to help lessen the 18 impact of this winter's rising natural gas prices on 19 consumers. 20 We have simplified enrollment in low-income 21 programs and increased eligibility so that more customers 22 qualify for a 20 percent discount on utility bills. 23 We have established a no shut-off policy as long 24 as minimum bill payments are made. 25 In addition, low-income customers will not be 26 dropped from programs during the winter months for failure to 27 recertify income eligibility. 28 We have required utilities to waive reconnection

fees and deposits for qualifying low-income customers this winter.

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We have directed utilities to expand and improve programs that allow customers to pay level bill amounts throughout the year.

We have approved a so-called 10/20 plan for PG&E that offers a 20 percent discount for customers who reduce their natural gas usage by 10 percent or more.

For SoCalGas customers we have approved using low cost storage natural gas to supply low-income customers, saving tens of millions of dollars.

We have approved expanded natural gas purchase insurance through hedging for utilities to protect against even higher natural gas prices.

There are a number of ways the PUC is ensuring the state has adequate natural gas supplies and infrastructure.

One way is through the energy efficiency.

Thus, we have launched the most ambitious energy efficiency and conservation campaign in the United States, approving over \$2 billion for energy efficiency programs for 2006 through 2008, much of which has implications in terms of natural gas.

Other ways the PUC is ensuring the state has adequate natural gas supplies and infrastructure is through renewable energy power and market monitoring.

As much as 50 percent of California's natural gas demand goes to generate electricity. Renewable power we think will lower the natural gas demand for use in electric

1 generation.

I think, as you all know, the Energy Action Plan 2 includes a goal of 20 percent renewable power used by each electric utility by 2010, and endorses an aggressive effort to achieve 33 percent renewable generation by 2020.

And sort of as an aside, the draft report on the 33 percent goal issued. A workshop was held on November 17th, and comments on the draft report have been received, were received as of December 1st.

I would also add concerning natural gas that we have instituted regular meetings with the gas utilities to monitor for problems.

We had one about two weeks ago in which we discussed with the gas companies how quickly they were implementing the programs, where they were at, and would they be ready by December and January. Our next meeting is scheduled with that group for January, around January the 15th.

In addition, the PUC is working with other states and federal agencies, including the Attorney General's office, conducting regular reviews and analysis of natural gas market information and data to protect consumers from possible price manipulation.

Finally, just sort of to summarize some of the specific consumer rebate programs, consumer and rebate programs that are available to consumers to lower or manage their natural gas bills, there is the California alternate rates for energy program, the CARE program. This is our

1 ongoing program. We have expanded it some for eligible 2. low-income customers to receive a 20 percent bill discount. 3 We also have the family electric rate assistance 4 program, FERA, lower rates for qualifying customers. 5 is of course the low-income home energy assistance program, 6 LIHEAP, for financial assistance with energy bills, 7 weatherization projects as provided. 8 There is low-income energy efficiency program, no-cost weatherization services, and as I mentioned before, a 9 10 level-bill options where consumers pay a level amount 11 throughout the year. 12 Those are basically the programs that we have 13 articulated and put in place for what we all think will be a 14 somewhat difficult time in the next few months concerning the 15 prices of natural gas. 16 I think we have done about all we can at this 17 point. We will certainly, if anything else comes along, we 18 will be coming back to the two Commissions to talk about it 19 some more. 20 Thank you. 21 COMMISSIONER PEEVEY: Thank you, Mr. Larson. 22 Mr. Blevins, do you have anything you wish to add? 23 MR. BLEVINS: No. 24 COMMISSIONER PEEVEY: Any questions or comments here? 25 Commissioner Grueneich. 26 COMMISSIONER GRUENEICH: Thank you very much. 27 I want to say that I think you and the staff have

done just a remarkable job of trying to put in place an array

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of programs. Our Commission had held an en banc earlier this year down in Los Angeles when we received an update from the utilities as far as their projections on where natural gas prices would be. And I am wondering if you or the staff could give us any information as far as are we looking at the retail cost to consumers, I think it was on the order, of perhaps a 50 percent increase on average in residential bills? Are we still looking at that type of an increase over the winter?

MR. LARSON: No, not generally. The weather has been more moderate than was forecast at the time. And also I think though the price of natural gas achieved a new high, I think it was on last Friday, of \$15 per million cubic feet, still most of the three major utilities believe that the prices will not be as high as originally forecasted in the residential sector. I think it is reduced from 50 to about 30 percent, roughly.

COMMISSIONER GRUENEICH: Thank you.

COMMISSIONER PEEVEY: Commissioner Pfannenstiel.

VICE CHAIRPERSON PFANNENSTIEL: Steve, you mentioned energy efficiency as being one of your major programs. I know that you have done really enormous work with utilities on their energy efficiency programs. But are those really geared to the individual customer for this winter?

For example, if the individual customer calls PG&E, for example, and says, gee, I don't know if my furnace is as efficient as it should be, I don't know whether I should be doing something that would be investing for the

1 longer term, are there programs now for individual customers 2. to get that kind of help right away? 3 MR. LARSON: Yes. First, in terms of the efficiency 4 program, it really is for the period 2006 to 2008, the over 5 \$2 billion program I mentioned in my comments, we have urged 6 the utilities, yes, to implement a quicker, better response to when people do call up and want to either switch out for 7 8 new types of equipment. All the utilities have existing 9 programs for that. We have asked them to accelerate that for 10 this coming winter, if at all possible. We will be 11 monitoring that to see if they do respond more quickly. 12 VICE CHAIRPERSON PFANNENSTIEL: But they still have 13 what used to be the energy audit programs for homeowners? 14 MR. LARSON: Correct. 15 VICE CHAIRPERSON PFANNENSTIEL: Thank you. 16 COMMISSIONER PEEVEY: Any other questions or comments 17 here on this? 18 (No response) 19 COMMISSIONER PEEVEY: If not, Director Larson, thank 20 you very much. 21 We will now turn to an update on the outlook for 22 summer of 2006. We are going to have a number of speakers 23 from the Energy Commission as well as the PUC and the ISO. 24 So we will start with Dave Ashuckian. 25 STATEMENT OF MR. ASHUCKIAN 26 MR. ASHUCKIAN: Good afternoon, Commissioners. David 2.7 Ashuckian with the California Energy Commission. 28 I'm going to talk about our summer outlook as well

as our first look at 2007 and beyond.

What I will do today is discuss the changes that we have made to our outlook since September 12th, which was the last time we presented our outlook to you, as well as discussing comments we received from a public workshop that we held just last Thursday on our draft summer outlook report which was just completed last week as well.

Since our last meeting we have met with the California ISO staff. We met with the CPUC staff, as well as various resource planners from some of the utilities, both muni and IOU utilities. And we have also, as I mentioned, published our draft report on the outlook.

Here we have our latest statewide outlook. This is the statewide version.

As you can see from this, the resources are actually pretty adequate at this level. So, actually, both the statewide level and the ISO level, the control level appears adequate. So I won't go into too much detail on this table, but I will answer questions you may have.

I also want to point out in our outlooks we have not considered at this point transmission outages because data for that is difficult to come by at this point.

We are looking at adverse conditions, but transmission outages are not one of those. As we experienced this last summer, those can have a major impact on reliability of the system. So I don't want to give a false impression that just because we are saying the reserve margin looks okay it means no one will have any problems.

Again, here is the California ISO control area.

As you can see again, it looks like there should be adequate resources at this level.

As we move on into Northern California, there's been a few changes since our last outlook. One of the most major changes is that we used to have what the import capability of north of Path 26 was and kept the flows between north and south isolated to show what each individual region could do. We have got a number of comments about that.

And because there's capabilities of a significant amount of flow, 3000 megawatts of flow between north and south, and the ISO has complete control over that flow, we believed it may have left a false impression there were more resources available in Northern California than is likely to be available because of the demand in Southern California.

So for that reason, in this version we have actually taken that 3000 megawatts off of the net import capability to show what is likely to be available north of Path 26, the retirements here, known retirements including Hunters Point as well as the San Francisco Peaker.

And again, even with those changes, there seems to be quite significant or adequate resources in north of Path 26 for the summer.

Moving into the south of Path 26 region. We have made a number of changes. Those include adjusting our counting of Mohave. In the past we were only counting the portion of that we believed was essentially controlled by California, about half of Mohave. We found out that in fact

the ISO considers the whole of Mohave because it ends up
getting into the control area, and they direct it back out
again. So essentially it is larger than we were considering.

But because Mohave is retiring, when we were only
retiring a portion of it it made it look like there were

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retiring a portion of it it made it look like there were extra resources. So what we have done is increased the size of Mohave for the retirement. We also increased the size of what was existing generation. So in fact when it retires, the net effect will be zero with those changes.

We have also updated the outage data as a result of new data we got for 2005 outages. And we also updated the congestion numbers after talking with the ISO staff because of the upgrades that have been done to the transmission system.

COMMISSIONER BROWN: Before you get too far away, on the issue of Mohave, is it your feeling that perhaps what we just ought to do is look to -- have you build a worst case scenario with Mohave being totally off line?

MR. ASHUCKIAN: Our scenario is Mohave totally off line.

COMMISSIONER BROWN: Okay.

MR. ASHUCKIAN: And if it happens to come back, it will appear as if it is a new addition to our outlook.

COMMISSIONER BROWN: Thank you.

MR. ASHUCKIAN: We have also upgraded the net interchange number by about 200 megawatts. Those are from the Devers-Palo Verde upgrades.

This is a more detailed explanation of what is

1 Line 21, the existing contracts -- existing plants that we are not aware of that have contracts. So this is just 2 3 information about what those plants are. 4 COMMISSIONER PEEVEY: Where is Pastoria? 5 MR. ASHUCKIAN: That's a good question. I'm sorry I 6 can't answer that. I will get that information for you. 7 COMMISSIONER PEEVEY: Does anybody know here. Isn't 8 it SP 26? 9 MR. PEREZ: Yes. 10 COMMISSIONER PEEVEY: A thousand megawatts? I didn't 11 see it on the tabulation. It doesn't have a long term --12 COMMISSIONER GRUENEICH: Maybe it got a contract. 13 MR. ASHUCKIAN: These were plants that we identified 14 during our power report as not having contracts at that time. 15 Some of these have gotten contracts, and we have dropped them 16 off. So we will take a look at that and make sure. 17 COMMISSIONER PEEVEY: Would you make a note of that 18 and get back to us, because it is a thousand megawatts. 19 MR. ASHUCKIAN: Yes. 20 Here is detail of the additions and retirements in 21 both the SP, NP and statewide as well as the muni updates as 22 well. 23 One change to this, MountainView appears to be on 24 line and operational at this point. So that one is ahead of 25 schedule. 26 COMMISSIONER PEEVEY: When do you expect Palomar to 2.7 come on line? 28 MR. ASHUCKIAN: I believe it is February. I don't

1 know that one off the top of my head. 2. COMMISSIONER PEEVEY: It says June here. 3 MR. ASHUCKIAN: These are plants we expect to be on 4 line by June 1st. 5 As a result of our outlook report and the 6 workshop, we did receive comments from PG&E, Southern Cal 7 Edison and the ISO staff. PG&E concurred with our outlook for the north of 8 9 Path 26 region. They felt like they would have adequate 10 resources in that region for both the expected as well as the 11 adverse conditions. 12 They were -- they asked us to consider -- in our 13 outlook we used the IEPR's demand forecast that we just developed for 2005 IEPR. And because that outlook has a low, 14 15 a base and a high range, we decided to use the more 16 conservative method and pick the high range. PG&E thought it 17 might be more appropriate to use the base range, the middle 18 of the road. 19 And it turns out that it is only about 2.0 110 megawatts difference between the base and the high case 21 for north of Path 26. 22 Actually, in the south of Path 26 it is only 75 23 megawatts. 24 So bottom line, it wouldn't be that much 25 difference if we used either one when you get down to the 26 bottom line. 2.7 Southern Cal Edison also noted that some of those 28 plants that we have listed as without contracts they believe

may have contracts, possibly through third parties who are using those plants as a hedge against liquidated damages if something else can't provide power.

So it may be difficult to actually find out which ones of those plants actually do have contracts.

And they also asked us to look at developing a five-year forecast using various scenarios of additions and retirements. And they offered to help come up with zones of what they thought might be appropriate considerations for scenarios, for additions and retirements.

The ISO said that they were, you know, working on their own forecasts. And Armie here will give you preliminary previews of that one they consider overall with the control area forecasts, and also believe that north of Path 26 and south of Path 26 would be adequate under expected conditions. They were concerned that SP 26 -- and again, I guess I'll go through this quickly, because you'll hear about this in a moment. They're concerned about adequate resources itself in Path 26 under adverse conditions.

And they're also concerned about the indication and/or utilization of demand response and interruptible programs for the difficulty it causes in actually trying to manage the grid.

COMMISSIONER BOHN: May I ask just a question just quickly? What did you all decide to do relative to Southern California Edison's request to develop a five-year scenario? Is that going to happen or --

MR. ASHUCKIAN: Yes. That was just last Thursday that

they asked us. And we'll be talking further about that.

You'll see we do have a preliminary five-year outlook that
we're showing you today.

COMMISSIONER BOHN: So the general intent is to go ahead and do a five-year scenario with or without them in some fashion?

MR. ASHUCKIAN: Yes.

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COMMISSIONER BOHN: Thank you.

MR. ASHUCKIAN: So with that, I'll move on to the five-year outlook. A good segue.

This is the statewide outlook. And what we've done here is taken the 2005 IEPR forecast, and essentially started with 2000 -- the expected conditions for 2006 as the base case. We've used what we know for retirements, and what we know for additions.

Right now, the additions are only Otay Mesa, and there's a few in the muni region. There are are no high-risk retirements. These are plants that -- they're 3,000 megawatts or so that don't have contracts, or we're not aware of that have contracts we're assuming that are still going to be operational.

We also are saying there's going to be no change in demand response and interruptible programs as of what we have already included. So as those programs change over the years, that would change this outlook as well. And we're using the high case 2005 IEPR outlook.

And, as you can see, what this shows as time goes, without these additions, demand will continue to grow and the

reserve margin will continue to decline. It's pretty much the same for the ISO control area as well.

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And on Path 26 as well, it looks like we have -- I don't know -- quite a few years before things start to get a little dicey, when you look at these three regional pictures.

CHAIRPERSON DESMOND: Dave, just a quick question.

Looking at the five-year outlook, there are two projects recently announced for which I believe work has begun. One is the G.E. facility. That's 750 megawatts high-frequency combined-cycle down in Riverside. And I also believe that Edison is working on a new peaker project located about 2 miles away. Are those reflected in these?

MR. ASHUCKIAN: No, no. Again, we look at -- once plants get really, you know, much closer along to expected-to-be-on-line before we start counting them.

CHAIRPERSON DESMOND: Okay.

MR. ASHUCKIAN: We've used this 75 percent probability that they will be on line. That's -- you know, how we actually derive that is a little bit uncertain, but -- but again, this has continued to be updated. As those plans move along, we will consider adding those.

COMMISSIONER BROWN: So Otay Mesa would not be in your calculation?

MR. ASHUCKIAN: Otay Mesa is in our calculation.

COMMISSIONER BROWN: Okay.

COMMISSIONER GRUENEICH: Let me ask, then. The numbers you're showing, for example, on page 6 -- that's the ISO control region. Are the numbers that you show on page 14

1 -- SP 26, is that the ISO control area only, or are you also 2. including the munis? 3 MR. ASHUCKIAN: On page 6 is the SP 26. 4 COMMISSIONER GRUENEICH: Yes. And that's clearly 5 labeled. It's the ISO. MR. ASHUCKIAN: SP 26 is the lower half of the ISO 6 7 control area. 8 COMMISSIONER GRUENEICH: Right. I understand. 9 MR. ASHUCKIAN: Okay. 10 COMMISSIONER GRUENEICH: My question was: on page 14, 11 when you're referring to SP 26, are you referring to the ISO 12 control area only? 13 MR. ASHUCKIAN: This is the same area. 14 COMMISSIONER PEEVEY: Same. 15 MR. ASHUCKIAN: Yeah. And that brings me to SP 26, 16 which, you know, indicates again that actually in this 17 region, it looks like things are going to get a little more 18 dicey as soon as 2007. And, in fact, it's possible that we 19 would have to recall on the net response of interruptibles to 20 avoid a Stage 3 in -- during adverse conditions in 2007, 21 assuming, again, no additions happen that we haven't 22 accounted for other than Otay Mesa, and no change in, you 23 know, the outlook assumptions. 24 CHAIRPERSON DESMOND: Dave, just a follow-up, then, on 25 the demand response. Do you forecast -- I shouldn't say "Do 26 you," but does the forecast take into account the staged 27 targets of that 5 percent by 2007? Are you assuming that it

is some percentage growth of what we just saw this last year?

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MR. ASHUCKIAN: What we did for this year was take a look at what actually occurred in SP 26 during the events that we had, and so we essentially said: Okay. This is what was -- is now dependable for SP 26.

Now, in fact, San Diego did not call on their programs, and so we're actually counting San Diego as zero at this point. What we did -- actually, San Diego's pretty small, but what we're doing now is for NP 26 and San Diego, we've taken the same ratio of enrolled to demonstrated, and assuming the other areas are going to have the same relative ratio of participation, we are not ramping that up as the programs are expected to increase. We're just saying, "We saw that last year. We're going to see the same next year."

And what you'll hear from Dave Hungerford is what's happened since the summer of those programs expanding. So it's likely these programs would provide, you know, more resources by the time things actually happen in 2006.

COMMISSIONER PEEVEY: One would hope, since we approved \$2 billion of expenditures over the next three years, that we get something for it. At least, that's what I claim in speeches.

Yeah, John. Commissioner Bohn.

COMMISSIONER BOHN: Just one question.

As the new person trying to sort of weave through all of these projections, let me bring it back to the following. When the press asks, are we comfortable that we have sufficient power resources to get us through 2007, is the answer to that, "Yes, we think so," or "We hope so," or

"We're not sure"?

MR. ASHUCKIAN: There's a -- well, it depends on what you think is okay, is the bottom line.

COMMISSIONER BOHN: Where I'm going with that, obviously, is simply to try to get down to the level as we try to educate and try to convey what it is we are doing collectively relative to what the state needs in terms of power generation and the rest. We need to try to converse on -- with the same language that we're using publicly as opposed to internally.

And I guess my question is: I have been under the impression that we were, if you want, seriously concerned about adequacy going forward. I am reading this and saying: we're not any longer seriously concerned.

Is that right?

MR. ASHUCKIAN: There is a concern that remains in south of Path 26. And there are things that probably could be done to help alleviate some of those concerns.

When you look at the state as a whole, things are looking okay. When you look at the control area as a whole, things are looking okay; but, because of the regional differences, there's still some concern. Again, getting back to under adverse conditions, at this point, things could happen.

We're not predicting firm load being lost with these programs. They appear that they will have the ability to come in and keep us operational; but you'll likely hear from the ISO there are issues with those as they operate the

1 system.

But all we can do is -- well, one of the things we're working on is -- and this has been brought out through the last couple of EAP meetings -- is the probability of these events actually occurring.

What these numbers don't show -- this is a determinacy approach. This is basically saying: if this always happens, this is what would be the result.

We're looking at the data on outages, on temperatures, you know, trying to collect data on transmission outages to show what is the probability of these events actually occurring based on the data that we have.

And right now, looking at just two of the probability -- you know, two of the parameters -- both temperature, which increases the load, as well as the outages -- the probability of these adverse conditions occurring on -- those two adverse occurring at the same time are fairly low.

So we can't say that, you know, the power's not going to go off. As we saw this summer, we had adequate resources on our forecast, yet people still had outages because of things that weren't anticipated, because of significant, you know, transmission outages; but what we can do is give you a better understanding of what resources we have, and what is the probability, what is the likely scenario of things that are happening.

COMMISSIONER BOHN: Have the probabilities changed between the first prognostication and this one?

MR. ASHUCKIAN: Yes. In fact, 2006 actually looks

better than 2005 did, so we are better off in 2006 than we were in 2005.

COMMISSIONER BOHN: Thank you.

COMMISSIONER PEEVEY: Okay. Others? Are you done with your presentation?

MR. ASHUCKIAN: Yes.

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COMMISSIONER GRUENEICH: Yes. I have a couple of questions.

With the 3,000 megawattes of import capability, are you saying -- you said that it was taken off northern California. Am I assuming that it was also taken off for southern -- it was never included for southern California? Because I remain concerned that if we have that 3,000 megawatts import capability -- and what I think you said was that it wasn't accurate to allocate that totally to northern California because a portion of it could also go to southern California, but similarly, it's not accurate not to show at all. And so I want to find out: how is it shown on these charts?

MR. ASHUCKIAN: That 3,000 megawatts can flow from northern California to southern California. If you looked at each individual control area as if it was an island in and of itself, northern California would actually have higher capability; but because some of that is actually counted as flowing to southern California, SP 26 is counting it as if it's coming in as an import.

COMMISSIONER GRUENEICH: Is it counting the full 3,000 megawatts?

MR. ASHUCKIAN: We are counting it as 3,000 megawatts into south of Path 26. So if there was a coincident peak demand in north of Path 26 on the same day, the same hour that it happened in south of Path 26, then the ISO would either decide: well, we're going to either leave it in northern California, or we're going to give it to southern California, but right now it appears that it would probably go to southern California. Because southern California's reserve margins are generally lower, it would be experiencing a problem sooner than northern California would.

So we're not eliminating it. It's still coming into California. We're just showing how it's flowing between north and south.

COMMISSIONER GRUENEICH: Okay. That addresses my concern. I was worried that it wasn't being shown. It's being shown for southern California.

My other question was: under our Energy Action

Plan, our two top priorities for meeting our energy needs

are, first, energy efficiency, including demand response, and
then renewables.

And you have the line in the charts for demand response. But if I sit back and say: does this give me any information about how our top priorities of energy efficiency and renewables are actually meeting California's needs, it doesn't. And is -- just so I can understand, is the existing -- where do we see the impact of our energy efficiency programs? Is that, for example, line 6?

MR. ASHUCKIAN: Actually, it would be line -- yeah,

1 line 6: the demand. 2. What we do is -- the efficiency programs are 3 incorporated into the demand forecasts. And so it doesn't 4 come up as a line: here's what this program got you; here's 5 what would have happened without them. 6 The demand forecasters include these expected 7 programs by what they're seeing as the future demand level 8 with these programs, and so we don't have a with programs and 9 without. 10 COMMISSIONER GRUENEICH: Okay. 11 MR. ASHUCKIAN: That number --12 COMMISSIONER BROWN: Dave, how does -- just as a 13 general matter, how do you calculate that? 14 MR. ASHUCKIAN: That's a good question. I'm not from 15 the demand -- I'm not a demand forecaster. 16 COMMISSIONER BROWN: No, but I mean, what do you look 17 I mean, what are the factors that make you secure that 18 you can put this, you know -- you can incorporate a certain 19 number in your chart? 2.0 COMMISSIONER GEESMAN: The IEPR included the 2006, 21 2008 programs that had been funded by the CPUC, and the 22 associated savings with those programs. 23 COMMISSIONER BROWN: Well, how do we know that, 24 though? I mean --25 COMMISSIONER GEESMAN: How do you know that the 26 savings are achieved? 2.7 COMMISSIONER BROWN: Yeah, that they pay off, other 28 than pay off the people that run the program.

1	COMMISSIONER GEESMAN: It's a risk in that's a risk
2	in the forecast.
3	COMMISSIONER GRUENEICH: Sorry. EM&V programs.
4	COMMISSIONER PEEVEY: Okay. Are there other
5	questions?
6	COMMISSIONER ROSENFELD: I think I'm I'm going to
7	say a word.
8	COMMISSIONER PEEVEY: Excuse me, please. Wait a
9	minute. We
10	Go ahead, Commissioner Grueneich.
11	COMMISSIONER ROSENFELD: Um
12	COMMISSIONER PEEVEY: No, no. She had one more
13	question.
14	COMMISSIONER ROSENFELD: I'm just trying to help out
15	Dave Ashuckian a little bit on the reliability of the energy
16	efficiency and the standards.
17	The the standards are soon to be adopted in
18	2005, so we know them very well. And we know the
19	constructions. And the savings that come from that
20	John Geesman said, for the IEPR, are based on extremely
21	well monitored and verified savings for the year 2004. So we
22	know very well that a dollar spent in the year 2004 yielded
23	so many megawatts and so many billion kilowatt-hours. And my
24	impression is that those figures are really pretty stable.
25	COMMISSIONER PEEVEY: Very good. Okay.
26	COMMISSIONER GRUENEICH: One last question, which was
27	turning to the second priority, renewables, which,
28	Commissioner Geesman, I know you can remind myself. Under

our State law, the utilities are to be increasing the renewable component by 1 percent per year. If we look at page 8 on the additions, do we have a way of knowing: are those including the renewables? And if not, where are they included?

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MR. ASHUCKIAN: We do include renewables. However -And this is one of the comments that we received
from PG&E.

-- because we are looking at peak summer demand on the hottest day of the year, and because a lot of the renewables that we're going to see coming on line are wind resources, we actually discount the value of wind, the capacity of wind, to 3 percent.

And so -- and we're also only counting those plants -- plants that we know are coming in. So we're doing our best to capture every megawatt of new addition that has come in, but depending on what the dependable capacity is, it may get small.

Now, one of the things that we're going to likely change on this is because we have -- we are showing both the planning convention -- the expected as well as the adverse conditions -- we will likely increase the capacity of wind in the planning convention, because -- and utilize the planning convention that they use for renewables under resource adequacy.

COMMISSIONER GRUENEICH: Okay. One thing I just want to throw out to think about when we get this type of information in the future is: if there is a way to

demonstrate what portion of energy-efficiency renewables that 1 2 the state is relying upon to meet its needs -- and I 3 understand that this is mostly done on a capacity basis. And 4 remind me. Under the RPS, it's done on an energy basis. 5 But again, I look back and look at the bigger picture. We've said that our top priorities are energy 6 7 efficiency and renewables. And it might not be bad to think 8 about. Can you give a snapshot, both to us as policy makers 9 as well as to the public, on how energy efficiency and 10 renewables are fitting in? 11 COMMISSIONER PEEVEY: Secretary McPeak. 12 SECRETARY MC PEAK: Thank you, Mr. Chairman. 13 I have a technical question and, I think, a 14 substantive question. I'm seeing there are footnotes. 15 don't find the place. Where are the footnotes? 16 Did you already ask this question? 17 Where do I find the footnotes? 18 COMMISSIONER PEEVEY: In another copy. 19 SECRETARY MC PEAK: They're the supernotes or 20 supranotes. MR. ASHUCKIAN: On the tables themselves. Oh, you're 21 22 right. They didn't get included in this. They are part of 23 our main tables in our report. I can get those for you. 24 SECRETARY MC PEAK: I might not have to ask this 25 substantive question if I saw the footnotes, but as I'm 26 looking at the charts, statewide and also north and south of 27 Path 26, we've got a number there that you may already have

addressed: the 3,000-plus megawatts of capacity not under

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1 contract, or generation not under capacity contracts. 2 So my question is: when you look at the 3 probability of these scenarios and conclude that 2006 looks 4 better than 2005, I gather you are assuming the availability 5 of the 3,000-plus megawatts; that that is available in the 6 system? 1 7 MR. ASHUCKIAN: That's correct. 8 SECRETARY MC PEAK: Okay. That's an important aspect, 9 I think, of us understanding maybe the dynamic going forward. 10 MR. ASHUCKIAN: That is why we've actually taken those 11 plants and now put them at the very bottom and actually 12 de-highlighted them, because we think that many of these plants do have contracts. We don't know about them or 13 they're confidential, and if we were to disclose that, we 14 15 would be violating confidentiality, but that we don't expect 16 them to be retiring between now and the end of summer. 17 SECRETARY MC PEAK: Right. Just to make sure I 18 understand the answer you gave me and the implication, it's 19 that 2006 probability looking better than 2005 assumes the 20 availability of that generation? 21 MR. ASHUCKIAN: Correct. 22 SECRETARY MC PEAK: And that means the numbers of 23 reserve margins for various scenarios in the chart above, in 24 the lines above in the chart, also assume that it is 25 available? 26 MR. ASHUCKIAN: Correct. 27 SECRETARY MC PEAK: Thank you. 28 COMMISSIONER PEEVEY: Any other questions or comments

on this? Mr. Geesman, Commissioner Geesman.

COMMISSIONER GEESMAN: Dian, the detail that you're looking for is provided for the years 2009 through 2016 in the Transmittal Report that we filed with you along with the IEPR. We break that down by each of the IOU service territories and each of the Energy Action Plan preferred resources.

COMMISSIONER PEEVEY: In that regard, John, I'd ask you this as well as Dave. We're on the cusp of adopting a rather ambitious solar program, \$300 million in expenditures next year and then on for ten more years through 2016, and the stated purpose of reducing or providing 3,000 mega -- the equivalent of 3,000 megawatts of generation. Now, I assume these are not in anything that we've just been talking about?

COMMISSIONER PEEVEY: But looking out as far as you just said, Commissioner Geesman, are they at all?

COMMISSIONER GEESMAN: No.

MR. ASHUCKIAN: Correct.

COMMISSIONER PEEVEY: Okay. Well, that's another little thing to be considered. I'm not talking about solar thermal. I'm talking about solar photovoltaic rooftop, which also happens to coincide with peak.

MR. ASHUCKIAN: And this is where a five-year outlook with some various scenarios might actually provide some additional information about where some of these programs could come in, make some assumptions about what those programs can provide.

COMMISSIONER PEEVEY: And I think it's important that

the left hand and the right hand be in some sort of communication here in terms of State policy matters.

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Okay. The next speaker now is Armando Perez from the ISO. It's nice to have you back.

## STATEMENT OF MR. PEREZ

MR. PEREZ: Good afternoon. It's my pleasure to be here as usual. Start with the -- okay. Technical difficulties.

Review of summer of 2005. As you know, the weather conditions in 2005 were relatively mild. However, we reached an all-time peak nonetheless, but that peak was below the most likely forecast.

Events in SP26 on July 21st resulted in the declaration of an emergency. Imports at Palo Verde had to be curtailed due to low voltage in the Devers area. AC cycling was called upon, and generator outages were higher than forecast. All of that contributed to that event. The comparison of the actual 2005 system conditions to the ISO forecast indicates the forecast was within an appropriate temperature adjusted range.

For the summer 2006 outlook, in terms of generation additions and retirements: SP26 dependable generation additions about 2,000 megawatts, SP26 known retirements 1580, for a net increase of 420. For NP26 we have 420 of additions, 215 of retirements and a net increase of 205. It looks to us and as was kind of amply demonstrated in the CEC demonstration that the control area generation additions are not keeping up with the anticipated load

1 growth.

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The summer of 2006 control area wise: In 2005 we expected 43 -- had a peak forecast of 43,809. In '06 we're expecting 43,960. Remind you that this looks a little different, but there were some readjustments to the control area because of the MID/TID control area changes. Total of control area imports were 9,000. We estimated now 8590, again, because of the control area changes. So total control area supply will be 52,809 in '05 versus 52,550 in '06.

Expected ISO control area demand for the most likely condition is 46,668 in '05. We're expecting 46,332 in '06, about a 2-percent growth plus also the control area changes. So total reserve capacity 6141 '05, expected 6218 in '06 with a reserve margin of 13.2 in '05 and 13.4 in '06. And I'm afraid I do not know what the asterisk means.

SECRETARY MC PEAK: Yes. I was about to ask you that.

MR. PEREZ: I knew you were going to ask me. So I'll try to find out.

SECRETARY MC PEAK: It actually means reserve margin, at least that's what it's --

MR. PEREZ: Probably a definition of what the reserve margin is.

SECRETARY MC PEAK: What the reserve margin, right.

MR. PEREZ: Yeah. That's my expectation. For the adverse condition --

COMMISSIONER PEEVEY: You can tell we're really on top of this.

MR. PEREZ: For adverse condition was 50,592 in '05

versus 48,996 in '06. And total reserve capacity again 2217, 3554. Reserve margin for the control area is 4.4 percent in '05, 7.3 percent in '06 when things are better.

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Talking about the problem child, which is SP26, SB generation capacity in '05 was 19,168. We're expecting 19,788. I'm not going to go through all of these numbers. I'm sure you can read them as well as I can. The most likely reserve margins are 6.6 and 8.2. For an adverse condition they dropped to 0.7 in '05 and were better in '06 at 2.3 if you think that's a better number than 0.7.

And I'm not keeping up. Thank you very much. Appreciate that.

So what's the outlook? Preliminary assessments indicates that a control area reserve margin are adequate for most likely, 13.4, and adverse, 13.3, forecasted condition. For SP26 for the most likely condition we have 8.2, but for the adverse conditions we're down to 2.3. So we're about 1200 megawatts short.

The assessments is based upon the physically installed capacity and our estimates of import capabilities. Net generation additions are less than load growth. However, import capability has been increasing and will continue to do so. And there's a slight increase in available demand response and interruptible programs are anticipated in 2006.

The next steps: There are difference between the ISO and the CEC forecast. We will continue to work with the CEC to share information, refine and compare the forecasts. We'll continue to act on and evaluate the potential for

additional generation retirements or other changes that would impact forecasts, and SP26 has little tolerance. And we will update you again when we have much better numbers in March of 2006.

This is a snapshot, snapshot in December of '05.

I hope you realize these are all fluid numbers and they change, not so much the load, but it's the generation that bothers me the most.

Any questions on this?

COMMISSIONER PEEVEY: Go ahead.

CHAIRPERSON DESMOND: Thank you. Just a quick question, Armie. How is the ISO accounting for the increase in energy efficiency which is being used by the CEC to reduce the demand forecast coming forward? I'm assuming that you relied primarily on the econometric forecast, but that might reflect historic investment levels and efficiency and we now have in the short term, as President Peevey just pointed out, nearly a tripling of that investment dollars. And I'm wondering if that's potentially one of the areas of differences here?

MR. PEREZ: No. The energy efficiency results in a reduction of the load forecast on a bus-by-bus level that we get from the utilities. The differences between us is -- and it's not a difference; it's a matter of whether we ought to be doing it one way or the other, and we need to figure that out -- is that they assume that the peak forecast is based on all interruptibles being off and all the mass response being off. We feel that you should be planning your infrastructure

1 to have all the load being served and not be planning to have some of the load not being served. Now, whether we're right 2 3 and they're right or we're wrong and they're wrong we don't 4 know. We're going to work it out. 5 CHAIRPERSON DESMOND: Thank you. 6 COMMISSIONER PEEVEY: Other questions or comments? 7 Yes. 8 SECRETARY MC PEAK: Sorry, Mr. Chairman. Still on 9 page 4, on the -- back to page 4, the control area forecast. 10 I see it is under the most likely band there where the 2006 11 is below the 2005 I see the notation of MID and TID 12 increasing there, I guess, a control area change, but really 13 it goes down overall. I mean I'm really trying to understand 14 the math there. 15 Sure. Before you have the MID and the TID 16 load and generation included as part of our control area. 17 Now they're going to be separate control areas. So remove 18 all their load. So our load estimates went down by the 19 amount that MID load and TID load, and the generation will be 20 adjusted if there's any MID generation that's not used in 21 their control area. 22 Okay. And overall you're assuming SECRETARY MC PEAK: 23 a 2-percent growth in demand statewide. 24 MR. PEREZ: Yes. 25 SECRETARY MC PEAK: In and out of the control area. 26 MR. PEREZ: Yes. 27 SECRETARY MC PEAK: And then this reflects not only 28 that growth in demand but the change in accounting where TID

1 and MID are taken out? 2 MR. PEREZ: Yes. 3 SECRETARY MC PEAK: Okay. I'm sorry to state the 4 obvious. 5 MR. PEREZ: No, no, no. No problem. There's nothing 6 obvious around here. 7 COMMISSIONER PEEVEY: Are there other -- Commissioner 8 Grueneich. 9 COMMISSIONER GRUENEICH: Yes. I'm looking at the 10 document we just got from the Energy Commission, page 8 on 11 their additions and retirements and then your similar chart 12 from the ISO on page 3, and they don't match up. I don't 13 want to necessarily take time now going through it, but it 14 would be very helpful if there were a way that the two 15 organizations could try to get together on this, because 16 we're not the technical experts here, and maybe if there are 17 different views, you could footnote them, but it seems to me 18 fairly distressing that we've got one document that says that 19 we're going to have 40 megawatts of additions in north of Pad 20 26 and then a second document that says we're going to get 21 420 megawatts. So again, I don't know that we need to take 22 time going through it, but it would be helpful to get, you 23 know, one view to us. 24 MR. PEREZ: Yeah. It's less. It's 205 versus 40. 25 (Laughter) 26 COMMISSIONER PEEVEY: Just to throw out another 27 number. Dave, did you want to say something? 28 MR. ASHUCKIAN: I do have a quick answer in that what

we found is we account for what is the summer dependable capacity for a plant. That is, it's already been derated for what it is expected to provide during hot weather conditions. What we found is the ISO takes the nameplate capacity, says that's what's added, and then counts the derated amount as an outage. And so that's why, when you get to the bottom line, our numbers are often very close. But if you look line by line, the numbers are different. And that's why we've kind of pulled our hair out trying to say: Look, why isn't this line the same as that line? Well, it's all accounted for. It just only shows up at the bottom.

COMMISSIONER GRUENEICH: Yeah. I guess, again, you can just step back and think of us as the poor policy people who are trying to say, does this mean there's a real difference between the two organizations or does this mean you just have a different version of the world, and try to give us sort of the Cliffs notes of what you all know down at the technical level.

MR. ASHUCKIAN: When you look at our adverse conditions without dependable -- without demand response and interruptibles, we're at 2.8 reserve margin. They're at 2.3.

MR. PEREZ: Right.

MR. ASHUCKIAN: That's pretty darned close.

COMMISSIONER PEEVEY: Commissioner Bohn.

COMMISSIONER BOHN: Again, at the risk of provoking a firestorm, following on what Commissioner Grueneich has said, it seems to me that the answer is either A or B, and that's, I guess, going to be what you said, who is it that can, and

then the next question is, who is that will decide this. It seems just nonsensical to get ourselves all wrapped up in this stuff if we've got different projections for different reasons. It probably doesn't matter or maybe it does whether it's A or B, but since we are collectively responsible for kind of figuring out whether it's A or B and since we can't decide it and nobody else seems to be deciding it, what should we do?

SECRETARY MC PEAK: Mr. Chairman.

COMMISSIONER PEEVEY: Let's give him a chance.

SECRETARY MC PEAK: Let's do that, and then I'll tell you what we did last year.

MR. PEREZ: I honestly think that the big source of the difference is whether you are going to take into account, you know, the demand response program or the interruptibles. If we can get that figured out between the two of us, the rest of the stuff should come with numbers that are very close to each other. But that other one is a philosophical issue. And you know, I think it should be my way, and I'm sure that Joe Desmond -- Mr. Desmond thinks it should be his way, but we just need to talk some more.

COMMISSIONER PEEVEY: Okay. Secretary McPeak, who has had the on-the-ground experience having to deal with this for the last year.

SECRETARY MC PEAK: Well, I was going to try to answer how we did it last year and point out the value of those monthly meetings and then the previous weekly check-ins and reconciliation. I think for a variety of reasons we've

gotten off schedule in part because I also wasn't around. I was on jury duty. Then I was in China. But it actually can't depend on one of us being out of the country.

COMMISSIONER BROWN: They had you on jury duty?

SECRETARY MC PEAK: Oh, yeah. They get me every year and they put me on the jury. I have no idea why they would do that.

COMMISSIONER BROWN: It should have preempted you.

SECRETARY MC PEAK: I know. But the point being, as the two chairmen will know, unless we have a process as you're bringing up the question, Commissioner Bohn, about why don't we have it reconciled, they have similar appro -- they have similar numbers, but they're not exactly the same numbers, and it usually is not A or B. It's usually C when they actually sit down and start going through it. And we need to have one forecast that as an administration, and actually the PUC where it weighs in on this as well in terms of what you're relying on with respect to the IOUs and their contribution to the generation within those service areas.

And so we need -- we're just at this point getting it to all three of us, I mean all -- I guess there isn't a third, well, yeah, there is, the ISO -- all three of the energy agencies in the administration. Today we're getting your best effort, and now the job going forward is to get it reconciled within the action plan on what do we do and what are our contingencies based on the forecast scenarios.

MR. PEREZ: Just so I don't leave you with the impression that there's a big difference. The problem that I

think we should do it the way the ISO is doing it is because you remember this whole presentation and the CEC started with the philosophy that no transmission lines were off. So you have that problem in there. Then we have an estimate of what generation is going to be, and you know how good we are at doing that, and then we have an estimate of the load and the temperatures, and August 25th we'll tell you how good we are at doing that.

So we think that the interruptibles should be used as a backup against an emergency, a little bit of a reserve that the operator has. If you're going to plan the system just with that number, you make the operation tighter and tighter and much more easy to make a mistake.

COMMISSIONER PEEVEY: We understand. Did you want to add something?

MR. ASHUCKIAN: I just wanted to add that we have attempted to provide both, if you have line 17, that's the without demand response interruptibles. Line 18 is with those programs. So you can see what those programs can do. Secondly, we've been trying to expand upon this probability analysis to show you that every one of these lines is not one number answer. It's a continuum of what's least likely versus the most likely. And as we move along with that probability analysis, I think we'll get to a better understanding that each one of these things, there's a high probability of what the number could be and a low probability, but there isn't one number answer to any one of these lines.

COMMISSIONER PEEVEY: I just hope that as we go forward in the next several years that this increased energy efficiency expenditures, the solar photovoltaic and ultimately solar thermal and all will all be taken in consideration here, and the utilities are signing up a lot of RPS programs, vendors. We have to get things into the numbers in a fashion that is -- I'm not as concerned as some. You have a little different function than the CEC, and it's reflected in your perspective and everything else.

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I do have one question. It's probably most for you, and that is, it's very regrettable but it's a fact of that life that the largest independent power producer in America headquartered in San Jose is in severe financial difficulty. Are there some implications for the CalISO in this, or can we feel quite comfortable that regardless of whatever course they choose in the next several weeks or months that we can count on that generation? Are you comfortable responding to that, or do you want to remark on that? If you do, it's fine.

MR. PEREZ: Let's just say that we've been almost talking on a daily basis. We're fairly assured that the steps that they're taking and the steps that we're taking will result in no effect, but I can't, you know --

COMMISSIONER PEEVEY: Guarantee it.

MR. PEREZ: -- guarantee that 100 percent.

COMMISSIONER PEEVEY: Joe, do you want to say anything about that?

CHAIRPERSON DESMOND: No. Actually, I don't mind. I

1 will echo what Armie says, which is that the state is engaged 2 almost on a daily basis in speaking with utilities that would 3 be affected, the DWR contracts, the Governor's office. 4 they are staying in close contact on those issues to make 5 sure those resources are available. 6 COMMISSIONER PEEVEY: There may be an economic cost in 7 terms of price of any kind --8 CHAIRPERSON DESMOND: Physical reliability should be 9 unaffected by any filing. 10 COMMISSIONER PEEVEY: I just think it is important to 11 recognize that. 12 The next, we have David Hungerford --13 They told me to finish my presentation. 14 got about three more slides. 15 COMMISSIONER PEEVEY: I'm sorry. Path 49 are all of what we call the short 16 MR. PEREZ: 17 term improvements on the lines between Arizona and 18 California. They all have dates of operation prior to the 19 summer of '06 with an increase in capacity across the river 2.0 of 505 megawatts. 21 The first is Palo Verde-Devers 500 kV Hassayampa -22 North Gila - Imperial Valley 500 kV series capacitors 23 upgrades are on time for an expected in-service date of July 24 1. 25 The one problem has been the static VAR 26 compensator to be located at Devers. We were able in 2.7 discussions with Southern California Edison and the

manufacturer, we were able to split the capacitor part of the

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1 SVC from the SVC part, so we get the capacitors in by 2 July 1st and the rest of the equipment in by September 1st. 3 That was a very good improvement. 4 The Devers transformer should be available in March of '06. The west-of-Devers upgrade should all be 5 6 completed by July 1st of 2006 using a special protection 7 scheme for generation tripping. 8 The Imperial Valley phase shifter is estimated to 9 be in service in '07. 10 We have another special protection scheme between 11 July and December to take care of the problems. 12 The east-of-the-river pathway will increase from 13 7550 to 7700 for the summer of '06, and that will go to the 14 full 8055 by September or a total increase of 505 megawatts. 15 That completes my presentation. 16 COMMISSIONER PEEVEY: Thank you very much. 17 If there are no questions, we will now move to 18 David Hungerford to talk about demand response programs. 19 Anybody that wishes to speak from the public here 2.0 or any of the other IOUs or others, please sign up with the 21 public advisor outside this room. 22 Thank you. 23 STATEMENT OF MR. HUNGERFORD 24 MR. HUNGERFORD: Secretary, Commissioners, good 25 afternoon. 26 I am going to give you a brief update on where we 2.7 are on demand response programs for the summer of 2006. 28 Much of my support is from Bruce Kaneshiro, my

counterpart here at the CPUC.

I am going to give you a brief overview of the joint demand response proceeding that was begun in 2002, the 2006 through 2008 demand response programs, our programs on tariffs for large customers, advanced metering infrastructure, and close with some estimates of demand response availability for summer 2006.

The original joint agency demand response proceeding was closed in November, having run its limit. And we had three other proceedings which have been created since its beginning to handle three major issues, which were advanced metering infrastructure, large customer programs and large customer tariffs.

There were some other issues that needed to be resolved in the closing of this proceeding, including transition funding for program operation until decisions were made for the 2006 through 2008 programs, the issue of realtime pricing tariffs and small customer CPP tariff options, and the Judge directed that those issues be dealt with in future rate design proceedings.

And there were a number of smaller but important unresolved issues, including the details of impact estimation, the M and V issues, development of standard cost effectiveness methodologies. And a process was established for there to be joint agency workshops this spring to deal with all those issues as well as the issue of demand response goals.

In default CPP proceeding, brief update: There

were two settlement proposals put out by the utilities and parties in November.

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For SDG&E and a group of parties there was a proposal to create a default CPP tariff beginning with the summer of 2006 with extensive customer support requirements and customer notification requirements that were possible or theoretically possible within the SDG&E service territory because of the smaller number of customers.

VICE CHAIRPERSON PFANNENSTIEL: Excuse me. Would you just make it very clear what size customers you are talking in this proceeding?

MR. HUNGERFORD: Customers with greater than 200-kilowatt of demand.

VICE CHAIRPERSON PFANNENSTIEL: Thank you.

MR. HUNGERFORD: For PG&E and SCE and parties they proposed voluntary CPP for summer of 2006 for PG&E and summer beginning summer 2007 for SCE. And there is a draft Decision expected to be released by the 27th of this month from Judge Cooke.

For the large customer programs proceeding -- again, we are talking about customers greater than 200 kw -- program filings were made in June 2005, with adjustments to existing programs, expansions, some modifications to try to increase participation.

There were substantial supplementary testimony filed in the late summer and early fall, particularly on cost effectiveness issues. And a proposed settlement was filed just a week ago on December 2nd reducing the budget for some

programs. And as of yet, we don't have megawatt impact estimates for those reductions.

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There were some program reductions, but a lot of the budget reductions were directed at customer support information elements of PG&E and SCE's proposals.

There will be a prehearing conference and cross-examination of witnesses for the settling parties in January. That date has changed since I created this slide. It is going to be the following week, although a particular date has not yet been decided, although it may have been today. The e-mails are flying fast and furious right now.

The advanced metering infrastructure deployment:
This is for the entire system, metering the small customers
and medium-sized customers who do not have interval meters at
this point.

PG&E received approval for \$49 million for predeployment activities. And they are going -- their Phase 1 is set to go into Vacaville. Hearings on full scale deployment will happen in March with a decision expected in July of this summer.

SDG&E has approval for 9.3 million in predeployment expenses. It is receiving bids and will have hearings in December of -- in the summer with final decision in December. And SCE has received 12 million to fund an effort to increase functionality of current AMI systems before making a decision.

Now we are relating back to the earlier discussions. Here is expected demand response in summer

2006. I used the terms "dispatchable" and "nondispatchable" here. This is part of the issues that will be dealt with in the workshops this spring, is the arbitrary line between price sensitive demand response and trigger demand response activities and existing programs like interruptibles.

For this definition I am following the resource adequacy language to consider dispatchable programs as programs and activities that can be dispatched in an emergency situation at almost any time, especially the day of a problem, and nondispatchable to mean programs that would be triggered or notified a day ahead, such as a CPP tariff.

Obviously, a CPP-type tariff, even if notified a day in advance, is dispatchable in a sense, but for these categorizations we are thinking of these, the dispatchables, as old-style interruptible or AC cycling-type programs or even smart thermostat programs and the nondispatchable to be behavioral demand response programs, some type of notices required.

For summer 2006 you will notice that there are two categories what we call -- two columns, subscribed megawatts and expected megawatts.

We have had these discussions in the IEPR hearings on this difference. This is also one of those accounting issues that is going to be dealt with in the workshop process Judge Cooke set up in closing the demand response proceeding that will be held this spring.

The subscribed megawatts are the total possible megawatts that are enrolled in a program that could possibly

come in at any one time. The potential of those -- that is a theoretical potential that would would never expect to be reached in any one incident or one event.

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The expected megawatts are calculations based on a number of things, the knowledge of the program managers, the abilities of the different customers enrolled in the programs to provide demand response and their willingness to do so, historical impacts, of which there is a fairly short record on some of these programs and a fairly long record on others in the case of interruptibles. We know we can derate the total enrolled capacity a certain amount based on historical experience.

In the newer programs, those derations are a little softer and we are not quite as confident, so we used the lowest numbers possible. So that we can consider this number in the right-hand column a reliable number.

So for SCE we see a total expected megawatt demand response for next summer being 1103 megawatts. For SDG&E we see 50. For PG&E we see 613. For a total of 1808.

In terms of, since I can anticipate the question, in terms of how close they are to the goals, I am seeing nods on the dais, in terms of the actual number of the estimated annual system peak are confidential numbers, so I can given you a percentage so I can come close to it in percentages.

For SCE, if we used the total of 1103, that exceeds the 4 percent goal by more than a couple hundred megawatts.

The SDG&E, the expected number is essentially

below the goal. The goal is much closer to the enrolled number or subscribed number.

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And for PG&E, the expected number is slightly below the goal. I will caution that when the demand response goals were set, it was not specified whether those goals were meant to include existing demand response such as SCE's AC cycling program or existing interruptible curtailable programs.

And these numbers you see do include those programs. So demand response goals are now, the way we are looking at it right here is how close they are in these percentages, is including the programs that pre-existed the demand response goals.

One more slide. For informational purposes, this is what we have on record for the municipal utilities that have demand response programs.

You notice this reflects something of what Dave Ashuckian referred to earlier, that point estimates are really not a good way of representing this, some of these potentials. And sometimes ranges are a better way to think about this.

SMUD reports their demand response programs in ranges. So that is what we have. That is why the totals are done in ranges like this.

And so from SMUD we have -- you notice these are tracked across the same. There is no change between the two years.

And we have -- you can see where those other

1 programs -- SVP is Silicon Valley Power. 2. COMMISSIONER PEEVEY: Any questions? 3 Jacky Pfannenstiel. 4 VICE CHAIRPERSON PFANNENSTIEL: Two questions. 5 back to your prior table. I assume that that 1808 megawatts was the number that Dave Ashuckian used in his forecast? 6 7 It is very close. There are -- I had MR. HUNGERFORD: 8 slightly newer numbers than he did because these numbers are 9 based on the monthly demand response reports from the 10 utilities. He used August numbers or months reported in 11 September, and I used numbers that were reported one month 12 later. So there is a small percentage difference. 13 VICE CHAIRPERSON PFANNENSTIEL: But they are intended 14 to be used for that purpose? 15 MR. HUNGERFORD: They are intended to be the same 16 numbers, yes. And we worked on our deration methodologies to 17 try to make them -- to try to be confident that our numbers 18 were accurate. 19 VICE CHAIRPERSON PFANNENSTIEL: That helps me 20 understand the source of the numbers he used. 21 Then another question. When you talked about the 22 conclusion of the original DR proceeding, your slide said 23 that realtime pricing tariff and small customer critical peak 24 pricing tariffs will be handled in future utility rate design 25 proceedings. 26 MR. HUNGERFORD: That's correct. 2.7 VICE CHAIRPERSON PFANNENSTIEL: When is that, and how

is that anticipated to happen? I'm just a little concerned

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1 about losing that rate design opportunity even as we are 2. talking about increasing the metering capability. 3 MR. HUNGERFORD: I don't think I can answer that right 4 now. I am not intimately familiar with the general rate case 5 schedules for the utilities at the CPUC. Someone else might 6 be able to answer that more accurately. I could find it out 7 for you. 8 VICE CHAIRPERSON PFANNENSTIEL: But your understanding 9 was that each utility, then, would take the outcome of demand 10 response proceeding itself and incorporate that into their 11 next rate design and their next general rate case? 12 MR. HUNGERFORD: That's correct. That's my 13 interpretation of the direction that the ALJ gave. 14 VICE CHAIRPERSON PFANNENSTIEL: Thank you. 15 COMMISSIONER PEEVEY: Other questions or comments 16 here? 17 Mr. Desmond. 18 CHAIRPERSON DESMOND: Thank you for this update. 19 First, the energy policy report the Commission 20 adopted had a big section I thought particularly on water 21 I mention water because I think the report indicated usage. 22 nearly 20 percent of the energy used in the State of 23 California related to water movement, water treatment and

Currently, there is no way of getting credit on a kilowatt-hour savings on a group of water conservation measures.

A general comment. I hope we could see at the

water end use applications.

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next quarterly meeting perhaps staff to begin to address how the Commission, the CPUC, might be able to make a link between water conservation and the kilowatt-hours associated with the energy conservation that comes from that.

Second part of that, obviously, would relate to the tariff designs that might be made available in order to allow for load shifting, a greater amount of load shifting to occur between the pumping. And that alone I think could add several hundred megawatts. Again, the report is very, very high in its range of technical potential. So I hope that would be something we would consider.

And then lastly just a general observation in terms of meeting the goals. As we think about resource adequacy, Phase 3, local area reliability requirements, demand response is inherently a capacity product.

And as a result, in order to satisfy the capacity requirements that the CPUC has put upon ESPs and IOUs today, I think that a capacity payment helps to at least create the conditions under which business model can emerge for sustained demand response.

I want to make sure we don't lose sight of demand response and loading order in design of the resource adequacy requirements because I think the two can actually work and reinforce one another.

COMMISSIONER PEEVEY: Thank you.

Commissioner Bohn.

COMMISSIONER BOHN: Just a quick question, as the new guy.

Are these numbers really useful for planning? I notice you get very precise in the top IOU, your 1103. Get down to the bottom, you go from 65 to 251, and that seems to be kind of okay in terms of the process.

Relative to planning to solve the problems that we are confronted with, is 400 percent kind of okay in this business? If 1103 is better than 1100 or 1107 or whatever turns out to be, are these comparable planning numbers, 65 to 251. You kind of just pick an average?

MR. HUNGERFORD: For the SMUD -- the IOU -- comparing the two slides, in the IOU numbers, those point estimates in the expected megawatts column are consistent with the number on the left of this range and in the municipal utility report.

SMUD didn't provide any best estimate numbers. They just provided a range in their filing.

COMMISSIONER BOHN: So that's okay? We don't care about that? Maybe we can't get it, which is okay, too. I am just trying to sort out how you used these things comparably in terms of total demand.

COMMISSIONER PEEVEY: Mr. Boyd, you want to comment?

COMMISSIONER BOYD: We do care, but we can't get it.

COMMISSIONER PEEVEY: Obviously, SMUD submitted these numbers, and you could pick a mid point if you wanted to. They are not in the Cal ISO controlled area, and there are all kinds of other things that reduce the significance, I suppose. But to me the most damning thing here -- and even if the number was doubled or tripled, it wouldn't make a hell

of a lot of difference -- DWP, 30 megawatts, Edison
1100 megawatts, that is a pretty searing indictment of the
inability of that large a municipal in the United States to
grapple with what needs to be done here as state policy, and
again, is a clarion call for more responsiveness in terms of
overall state energy policy, it seems to me.

That is just a comment. You don't have to comment on my comment.

MR. HUNGERFORD: Thank you.

COMMISSIONER GEESMAN: Which is an unfamiliar role for me.

I will say, as you well know, their explanation would be that they have planned their system to provide greater reserve margins than the IOUs do and that they don't have to rely on these programs to the degree that Southern California Edison does.

COMMISSIONER PEEVEY: So be it.

Any other comments?

Commissioner Grueneich.

COMMISSIONER GRUENEICH: I just wanted to comment briefly on what Chairman Desmond mentioned about looking at the role that water, efforts with regard to water resources can play, that I think that that is in fact a very important role and that we here at the Commission are going to be adopting a water action plan tomorrow that is picking up a bit of what can be done. But we only regulate in a very

small minority.

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But my memory is that last week the draft climate action plan was released to the public, and it calls upon the resources agency to be heading up basically a statewide effort to be looking at what can be done in terms of increasing efficiency and making better use of our water -- of the facilities used to supply water so that there is less demand on the energy system.

So I think that Chairman Desmond's point was very well taken. And you might coordinate with the Resources

Agency who I think has been tasked to specifically look at this area.

COMMISSIONER PEEVEY: Secretary McPeak.

SECRETARY MC PEAK: Thank you, Mr. Chairman.

I also note that my colleague, Secretary Chrisman, has now joined us, so we are going to need to make room for Mike up here. He has actually been to Sacramento and back trying to make this meeting. So I am very grateful for all his efforts.

COMMISSIONER PEEVEY: He has expressed an interest in sitting in the back of the room rather than here.

SECRETARY MC PEAK: He wants to be disassociated with the rest of us. We won't allow that, though.

On this chart, when I ask a question about this chart and another question, this is the chart that is up on the screen, the muni chart that is up on the screen, am I to understand there are only three municipal utilities who responded? We don't have MID and TID in these numbers? And

did we ask them all? Or what happens here?

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MR. HUNGERFORD: I went through all of the utility reports, municipal utility reports, to pull these numbers, and none of the other municipal utilities reported having any demand response programs in a line item for that program.

But I didn't do any further research to contact the utilities to see if indeed they just misreported.

SECRETARY MC PEAK: CMUA at one point, Jerry Jordan, gave us a full packet, and I thought that there was more activity that they were recording than was shown here. So maybe we could just ask CMUA to also survey their own members, because we do have many of the munis in very, very hot areas. So we have got potential for more spikes and so we need to have their assistance. There's only three showing here, though.

MR. HUNGERFORD: That's correct.

SECRETARY MC PEAK: Okay.

MR. HUNGERFORD: That is based on their reports to our supply office.

SECRETARY MC PEAK: Then on the overall report, that you presented, the timetable that you have for the advanced metering and dynamic pricing, which there is a lot of predeployment resources being committed by the IOUs, my question is do I understand that this means that still in 2006 that for all new construction dumb meters are going to be installed?

MR. HUNGERFORD: I can't answer for PG&E, but that is true for SDG&E and SCE, obviously.

1 COMMISSIONER PEEVEY: Mr. Rosenfeld. The only thing that we have 2 COMMISSIONER ROSENFELD: 3 seriously underway is for more construction 2008. Ahead of 4 that we have left it up to the utilities themselves who are 5 still contracting for the meters. 6 COMMISSIONER PEEVEY: Any other questions or comments? 7 (No response) 8 COMMISSIONER PEEVEY: If not, we will move to resource 9 adequacy. 10 John Gallagher from the PUC. 11 You have altered your appearance a bit, 12 Mr. Gallagher. 13 MR. GALLAGHER: Lost some weight last week. 14 STATEMENT OF MR. GALLAGHER MR. GALLAGHER: Good afternoon, Commissioners, 15 16 Secretary. I am going to give an update on resource adequacy 17 and procurement. 18 There are three big procurement and resource 19 adequacy related tasks for the Commission on its plate for 20 I will introduce them on this slide and talk a little 2006. 21 more in the next couple slides. 22 The first is the 2006 procurement proceeding where 23 we will attempt to tackle, among other things, the issue of 24 ensuring that new generation does occur on a timely basis. 25 One of the things we are considering is whether to 26 adopt a cost allocation mechanism like the one that Edison 27 proposed a few months back. 28 The second set of issues is the adoption of a

local capacity requirement as a follow-up to our resource adequacy proceeding, and in addition, remaining resource adequacy issues. Among those issues will likely be the consideration of a multi-year resource adequacy requirement.

Our plan here is to issue a new rulemaking in part because we are reaching the statutory closing date of the existing procurement rulemaking. So I should say actually two new rulemakings, one for procurement, one for resource adequacy next generation issues. And the new rulemaking in procurement, I will get to that, will be early next year. Rulemaking on resource adequacy we expect to have out this week. I believe there is an item on this week's agenda.

The third set of issues is the capacity markets issue. I should say that while I would very much like to push the consideration of whether to adopt a capacity market in California forward on a parallel track with the local capacity requirement issue and the procurement issues, we are not certain we are able to do all three of those things at the same time.

We are still considering it. We have no final decision yet, but the likelihood is that we are going to stage the consideration of capacity markets until after we adopt the local capacity requirement in the new resource adequacy case around the middle of next year.

And we are interested in whether you or others think we should be setting our priorities differently in this regard.

So 2006 procurement proceeding, under President

Peevey's guidance, we have been attempting to tie the CEC's integrated energy policy report proceeding and the PUC procurement proceeding closer together. We are going to use the outcome of the (inaudible) process (inaudible) in the 2006 procurement case.

I think Chairman Desmond mentioned a little while ago, the CEC adopted its transmittal report of a few weeks ago. President Peevey issued a ruling a week ago Friday now that kicks off the 2006 procurement case, sets up a process to do a fair amount of work before the procurement plans are actually filed by the utilities.

For instance, we are holding a workshop on Wednesday of this week. We've put out quite a bit of information to the parties. And what we're trying to do here is to -- to do some work before the plans are filed, so that the plans that aren't filed are, in fact, more robust and more useful to us than they were on the 2004 go-around. The OIR itself, through rulemaking for procurement, we expect to have out by late January/early February.

And, as proposed by the ruling that

President Peevey put out on December 2nd, the first stage of
the procurement proceeding considers new investment in new
generation, includes the potential adoption of a mechanism to
allocate the cost of such investment across LOCs.

We've also indicated in the ruling that

President Peevey put out that we'll likely make ESPs

respondents to this year's procurement proceeding. And we'll

be considering asking ESPs to file long-term procurement

plans, so that we get a picture across the whole system.

Finally, one new element in this year's procurement effort is to better coordinate the work of the Energy Commission, the ISO, and the PUC on transmission planning, and to incorporate specific transmission plans into the long-term procurement filings, and to begin to move toward better integrated resource planning that asks parties or entities in particular to present long-term plans that consider trade-offs and linkages between investment in new generation and new transmission.

We're holding a workshop on Wednesday afternoon on this week on the transmission issues. Wednesday morning is procurement issues. Wednesday afternoon is transmission issues.

Turning now to resource adequacy itself, our October decision resolved most of the issues necessary for load serving entities to make their compliance filings, which are due January 27th.

Just to back up a bit, the requirement is that by January 27th, load serving entities demonstrate that they have 90 percent of their reserve requirement under -- either owned or under contract for next summer. That reserve requirement is their peak load, plus a 15 percent reserve margin. So 10 percent of that 15 percent has to be in place as of January 27th. They have to make a compliance filing to us demonstrating that that's in place.

In order to work through some of the details of the compliance filing, in an attempt to get some consistency

in the compliance filings, we held a workshop last Friday. It was attended by all the major load serving entities. And the intent was, again, to address the implementation details and try and get everyone on the same page for the compliance filings.

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Our staff put out a template. We worked closely with the ISO doing this. We put out a template for the compliance filings to be made. There was, as I understand it, a pretty significant degree of consensus. We've got additional work. We'll be putting another version of the template -- I think the target is the end of this week.

I should mention that some parties in the proceeding were less than wholly satisfied with the Commission's decision on resource adequacy, particularly decisions to defer imposition of local capacity market circles the local capacity requirement; but in the end, we simply didn't have a sufficient record to adopt the local capacity requirement for 2006. We do intend to have the requirement in place for 2007.

Redesign is scheduled to be implemented.

You are are probably aware also that there were parties less than satisfied with the way that we treated the phase-out of firm LD energy contracts for contracting purposes.

The final decision was somewhat looser on this point than was the proposed decision, but as a practical matter, the difference in the quantity of nonphysical contracts that will count towards RA under the adopted

decision versus what was in the proposed decision are rather small.

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And another couple of recent developments on resource adequacy that I should mention here on the slide is -- one of them is the passage of A.B. 380, which clarifies the PUC's authority over ESPs for resource adequacy purposes, and directs us to work with the ISO to establish resource adequacy requirements for all load serving entities. So we'll be doing that in the coming year as well.

A.B. 380 also has language in it requiring that each load serving entity maintain to meet its load requirements. And that language -- we have, of course, exactly what it means. It certainly seems relevant to the question of whether an energy-only resource adequacy requirement, as some people have advocated, is still something on the table. We'll be taking a closer look at that.

I should note that A.B. was signed by the Governor. That provides the assurance of cost recovery for contracts that are entered into between repowered generation units and load serving entities under cost of service rubric. So we will be looking forward to whether we receive any such contracts.

And now, turning to capacity markets, the PUC staff Web paper was issued in August. We received comments on the Web paper in October. The comments ranged from strong support to strong opposition. That was slightly surprising to us.

One item of note was that the ISO suggested considering multiple alternatives, including taking a look at an energy-only resource adequacy requirement with some protection built in. We were somewhat surprised to see that most of the ESPs opposed the idea of going to capacity markets.

One of the reasons that surprised us was because one of the reasons that we had promoted or suggested the idea of going towards capacity markets was that we thought it would make it easier for smaller load serving entities like ESPs to comply with the resource adequacy requirements. Nonetheless, most of the ESPs were against the idea.

Finally, as I note on the slide, several commenters told us that our priority ought to be ensuring investment in new generation takes place promptly, rather than on staged capacity markets. So that's part of, frankly, the reason that we're proposing to stage the things, which we are with investment -- with the mechanism for investment occurring as the number-one issue of the procurement proceeding, and with capacity markets likely to be taken up after the middle of next year.

This is the same slide I put up in the June 2005 meeting. And I have it here again. I have it updated to include some recent information, such as the SDG&E sunrise transmission proposal. I included it here as a reminder under the loading order investment in conventional generation. It's necessary, but only one of the strategies worth pursuing to meet the state's growing energy needs.

Principally, the number-one priority, of course, is energy efficiency. Number two is demand response, as we've heard already today. And we have some very aggressive targets, particularly on the energy-efficiency side.

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I don't know if you can see it from where you're sitting, but on the top line over at the right, we're looking at 400 megawatts of new energy efficiency for the period of 2006 through 2013. Our staff is now into the evaluation -- measurement and evaluation part of energy efficiency. And that's the set of rules and protocols that we need to set up to ensure that those targets are actually -- actually arrive.

So conclusions. The 2006 procurement case will address the mechanism to ensure new generation. That's going to be number one on the list in that proceeding. The working assumption continues to be that long-term contracts will be necessary for new generation. And we need to facilitate those contracts.

On resource adequacy, major implementation issues were decided in the October decision. The local capacity requirement will be adopted by the middle of next year for implementation in 2007. And we're still digesting comments on the December markets paper, but we expect at this point, anyway, to take that up after the local capacity requirements are adopted.

Thank you.

COMMISSIONER PEEVEY: Thank you very much, Mr. Gallagher.

Any questions or comments on this?

Secretary McPeak.

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SECRETARY MC PEAK: I want to be reminded on the resource adequacy: what is the requirement on reserves, and how are those reserves calculated?

MR. GALLAGHER: The requirement is that each load serving entity -- that includes IOUs, ESPs, and CCAs, when we get them -- are required to meet 100 percent of their summer peak demand, plus a 15 percent reserve margin.

And on a -- what we call "a year-ahead basis," they have to show us that they've got 90 percent of that summer reserve margin locked up or in place.

Now, the first year-ahead showing is actually going to be January 2006 for the summer of 2006, because of the way the timing worked out. And then the second part of that requirement is that on a month-ahead basis, the load serving entities are required to demonstrate that they've got 100 percent of their peak load, plus 15 percent reserve margin in place.

SECRETARY MC PEAK: Okay. A follow-up comment. Thank you very much for that explanation and a reminder. We had thought that that resource adequacy requirement would still be driving private investment or start driving additional investment, because that would require additional contracting, therefore, greater stability, you conclude, on the long term. The importance of long-term contracts in order to -- to support a market and a market for investment in California.

Do you want to comment on what signs you're seeing

that, in fact, that theoretical working approach is still viable?

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MR. GALLAGHER: Sure. What I have said in the past is that I see sort of two prongs towards ensuring investment in new capacity. One is the resource adequacy requirement, which is simply a year-ahead showing at this time. And we will take up the idea of a multiyear showing as we go forward, but right now it's a year-ahead showing. That's one piece of it.

The second piece of it is the long-term procurement plan filing. The utilities are -- only the utilities at this point is required to come in and file with us plans that show how they're going to make up their needs over the next ten-year period.

MR. GALLAGHER: That's right. Now the 2004 procurement filings were not extremely robust, so, for example, an LSE expected a need for new generation in Year X, their plan said that a generation plant appeared in Year X.

SECRETARY MC PEAK: Ten-year being long term?

One of the points of doing some up-front work before the plans are filed this year is to make those filings more robust, so if they need -- if their plans are going to show a need for generation in Year X, they're going to show us in some manner what they're going to do to get that generation in Year X.

And so I do think that the framework we've established -- you know, we're on the right track, but at this point, I have to confess that it's not showing the

results we would have hoped would have been shown. At this point, we have not seen completed RFOs for new generation yet. Edison's was withdrawn.

PG&E does have one out for new generation that -they have told us they expect to bring us contracts by
January. And so that's, I think, a success story, or it's
potentially a success story.

But really the third leg of it that we don't have yet is to -- we've said that we expect new generation to be supported by long-term contracts at this point. We expect resource adequacy and procurement to drive the need for long-term contracts, but so far we haven't seen that we've done enough to facilitate or to ensure the new long-term contracts are coming into effect. And that's why we're going to take up the cost allocation mechanism or alternatives to it in the procurement proceeding.

So far what we've heard from the utilities is that they can build or they can satisfy the resource adequacy needs from existing generation for the short term, although everyone acknowledges that the system as a whole, particularly in the south, is short.

So, one way or another, we've got to make sure that the system needs are met. And we're going to take that up in the first round of the 2006 procurement proceeding.

SECRETARY MC PEAK: Can I ask one follow-up question, Mr. Chairman, on the reserve capacity, the 15 percent of the peak on a year-ahead basis, and then going to a month-ahead basis? In the October ruling, was there any further

1 definition of how much of that 15 percent could be in demand 2. response? 3 MR. GALLAGHER: Dispatchable demand response counts, 4 so things like the interruptible programs, things like the 5 A.C. cycling programs -- they can count. 6 SECRETARY MC PEAK: And no limitation on how -- what 7 portion of the 15 percent can be in dispatchable demand 8 response? 9 MR. GALLAGHER: I don't believe there's a megawatt 10 I think there is a -- there is an accounting limit, 11 and I can't recall the details of it right now, but we can 12 get you that information. 13 SECRETARY MC PEAK: Okay. 14 COMMISSIONER PEEVEY: Other questions or comments? 15 Commissioner Grueneich. 16 COMMISSIONER GRUENEICH: Yes. Looking at your chart 17 on the EAP implementation, there's an item called 18 "distributed generation." Does that include combined heat 19 and power? Because I believe we added it in EAP II as an 2.0 area that we want to focus in on. And I know that the Energy 21 Commission, in their new IEPR, has already made a 22 recommendation that there be concerted effort by the State to 23 bring on line to meet combined heat and power. 24 Maybe that -- this is new enough that it hasn't 25 been brought into the charts. So if it's not there, I'd like 26 to suggest in the future we really start to think about how 2.7 we're tracking our efforts in combined heat and power.

MR. GALLAGHER: Right. This chart, as I said, is the

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1 same slide I showed in June, so I did not get around to 2 getting it updated. That's something that we will put in future versions of this chart. 3 4 COMMISSIONER PEEVEY: Very good. 5 Any other questions or comments? If not, we'll now move to a review of the 6 7 PIER program -- the Energy Commission's PIER programs. 8 Martha Krebs, nice to have you here. 9 Thank you, Mr. Gallagher. 10 MR. GALLAGHER: Thank you. 11 MS. KREBS: Mr. President, Mr. Chairman, members of 12 the Commission, it's --13 COMMISSIONER PEEVEY: Press the button (indicating). 14 MS. KREBS: Okay. 15 It's a pleasure to be here this afternoon, and to 16 provide you with some information about the PIER program. 17 In my presentation this afternoon, there are two 18 parts: a very brief illustration of energy policy and how it 19 affects PIER, and how PIER undertakes supporting research on 2.0 behalf of California; and the second part is an explicit 21 illustration of some of the results that we've had that are 22 relevant to the EAP action items for R & D. 23 This is simply to compare and contrast the 24 integrated energy policy report, which has been driving a lot 25 of both the Energy Commission members and staff activity over 26 the last year, and the Energy Action Plan II. And 2.7 essentially, they're very comparable. 28 The Energy Action Plan calls out RD&D. And that's

what's going to drive most of my presentation today, but the energy policy report comments on and recommends activity in R & D throughout.

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The public interest energy research program was established in 1997 as part of the electricity restructuring. And it was intended at that time to provide benefits to electricity ratepayers.

On an annual basis, \$62.5 million is used for research provided by a surcharge on IOU ratepayers. And we have approximately 3- to 400 active projects at any given time.

In 2005, I believe -- actually, in 2004 the PUC passed a rule that began a program in natural gas research administered by the CEC. And that's expected to grow to \$24 million by 2009.

My next slide is basically an illustration of how I like to think about the programmatic structure of the PIER program. That is essentially established by statute and CEC policy guidance.

The three initial pillars -- I think, crucial pillars of the PIER program -- are what were originally expressed in the loading order efficiency renewables and clean fossil or advanced generation. The underpinnings especially for renewables and advanced generation were that PIER would focus on distributed generation, as opposed to large-scale generation. And so the research programs that we look at are within that context. And we also examine the systems issues associated with distributed generation.

The requirements for demand response, especially in -- and the technological issues that demand response represented came to us very strongly after the crisis in 2000, 2001, along with strong direction on infrastructure, especially with respect to transmission, to a lesser extent distribution, but that will -- we expect to see more development on that side.

And with -- throughout the existence of PIER, the requirement for understanding and mitigating the environment health and safety impact of energy demand and use were -- energy demand and production were built into the PIER program.

Just for your information, I thought it might be useful to understand how the PIER program is administered by the Energy Commission. We have a somewhat different process for natural gas than electricity. And that's represented on this slide.

The R & D policy committee of the Commission has -- does an annual budget plan review, and a midyear review. The project -- it also has responsibility for review and approval of each project during the year. When that -- when those projects are embodied in contracts, those contracts go before the full CEC for review and approval. And over the lifetime of its -- of the PIER program, we've had responsibility for preparing five-year plans. A plan is due March 15th of this year for the reauthorization of the program by the Legislature.

In the case of natural gas, the CEC R & D

committee submits to the PUC an annual budget plan for your approval. And the 2006 plan, I understand, is on your agenda soon.

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Upon receiving that approval, the approval of individual projects and contracts is done comparable to the electricity side of things.

We have proposed to you that we submit a five-year plan as well. And that will be coming forward in the coming year on a similar -- similar schedule to the five-year reauthorization plan.

A new element that was -- I mean, I'll discuss a bit more later -- is a requirement for a joint strategic plan for transportation that is done jointly with the ARB. And it will be submitted for your approval as well.

This slide shows the budgets for both the electricity -- the '05/'06 electricity program as well as the calendar year '05 and the proposed calendar year '06 natural gas plans. The -- they run on different years, as you know, and so this can't be quite completely comparable.

I highlighted the areas. I'd be happy to talk about any of these areas, but I highlighted the new program that's in transportation. It appears the '06 natural gas proposed plan there is in the '05/'06. As of May 2005, prior to passage of the legislation, there was nothing in the electricity program for transportation.

The program support line is a combination. Let me go to the bottom line first, because this -- the total for the electric program in '05/'06 is indicated at

\$77.5 million. That includes \$10 million of repayment of a prior-year loan, which was made to the Legislature a few years ago, and which has come back to us.

The program -- the fund that the research for PIER collect -- the electricity program collected in is also used to support the PIER staff. And that's what's represented -- and to provide technical support to the PIER R & D program.

And that's what's represented in the program support line.

The reserve that is represented in the last line was a decision made by the R & D committee. That will be revisited in the midyear review to consider opportunities that we're going -- that we're expecting to be identified in the integrated energy policy report. They include transportation, energy, and water, the energy and water nexus, storage that would be important in a number of -- storage technologies that would be important in a number of areas, combined heat and power, plus the possibility of additional renewables technology; but this is to be considered by the R & D committee in the next -- by the end of January.

The next item that I have here is simply to remind the Commissioners that the issue of what constitutes public-interest research has been very important in the development of the PIER program, and has been revisited in the recent five-year planning activity that is under way.

I am not going to read this to you, but it's not only important from the perspective of the five-year electricity plan, but also because of the newness of the

natural gas program and the addition of transportation to the mandate of PIER.

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And what is simply on the left side of -- in the blue boxes of this -- of this slide is a sort of statement of what was in the Warren-Alquist Act, or the amendment to the Warren-Alquist Act that created the PIER program. And so we have created these as tests which a project or any project that comes before PIER needs to be able to meet.

The -- this slide simply is an illustration of how, within the PIER program, energy policy drives the execution of the PIER program from planning through project management and execution, to a program and project review for results when the projects are done.

I think the important thing that I'd like you to carry away from this slide is that energy policy is something that drives energy R & D, either from the -- either from the perspective of meeting policy or anticipating the opportunities for policy or, at the end of the project, the project or program execution, the possibility of revising policy.

Another -- another element that is worth stating here is that, in all of the steps from planning through management and execution as well as review, we carried this activity out with partnerships always in mind, whether it is taking into account DOE programs that are already in place, utility requirements that are -- for things like emerging technology where they become a partner for us or with the private sector, particularly if we're moving tools or

1 products into the market for people to purchase. Then we 2. build these partnerships into our planning into the actual execution of the -- of projects, and into review. 3 ] 4 The next section of --5 COMMISSIONER PEEVEY: Let me interrupt you just for a 6 moment just to say the following: Procedurally, I mean 7 we're -- you've got a tremendous amount of information here. 8 And these next action items through 13 I could see where we 9 could easily spend a very long period of time, but we 10 unfortunately don't have that time. 11 MS. KREBS: And what would you --12 COMMISSIONER PEEVEY: I'd like you to pick up the pace 13 considerably if you possibly can. 14 MS. KREBS: What I would do is pick a few of these next slides. 15 16 COMMISSIONER PEEVEY: That would be fine. 17 MS. KREBS: If any one has suggestions? 18 CHAIRPERSON DESMOND: My suggestion, Martha, is 19 actually I think you can very quickly go 1, 2, 3 right 20 through 8. I think we'd get a little bit of the stuff. 21 They'd get a good sense. I think all we're trying to 22 communicate here is how the work is related to the policy 23 issues. 24 MS. KREBS: Right. Yes. 25 CHAIRPERSON DESMOND: So very quickly. 26 MS. KREBS: Okay. So I don't have to go through this. 2.7 You know that better than I do. You're interested in energy

efficiency technologies being transformed to tools and

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standards. I would direct you first to the -- you know -- to the second -- to the second item here. We have a huge program, which Commissioner Rosenfeld could answer questions to better than I, about support that we've given to Title 24 standards both, and that even for the 2008 standards we already have a program underway, that it pretty well will bring new technologies into the marketplace.

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With respect to demand response, what's worth noting here, let me just say, in Item 1, this is part, both of these examples are part of a \$15 million investment over the last couple of years in demand response that utilizes the capabilities of the private sector as well as our national labs. They're in partnership with the Department of Energy's demand response programs. And in the case of the first example, not only have we engaged 23 commercial sites in automated demand response technology, PG&E is interested in a large-scale demonstration.

With respect to new technologies for renewables and greenhouse mitigation, I simply wanted to represent predominantly renewables here and to indicate, probably the next thing I ought to say is that particularly the wind program that we have underway is a strong partnership with the National Renewable Energy Laboratory as well as with CalISO. This is simply a update, if you will, because we've just made our initial investments in natural gas. The last bullet tells you what kinds of things we're investing in. I think that they are relevant to the activities that I've read about in the EAP.

With respect to the next item on petroleum-fueled vehicles, this is a -- rather lengthy and so I won't go into it; I'll answer questions on it -- description of some of what we're doing to get ready for the -- to meet the mandate of the legislature on transportation and the natural gas program. And I indicate that the R&D Committee will be looking at what they want to spend the electricity funds on transportation.

In terms of clean coal technology R&D and CO2 sequestration, CEC is the leader of a 20 some million dollar program, 18 million of which comes from DOE and its partnership of multistates across the Pacific Northwest and Southwest as well. And we've had -- the second bullet simply indicates that we've had feedback from one of our earlier funded programs on oxy-fueled technology into the Westcarb program.

The next item simply says that we've had activity on dry cooling that is paying off now, and we released a request for proposals on once-through cooling at the end of November and -- that the request for proposals was released with the proposals due at the end of November. So we'll be in the process of evaluating them soon.

The transmission program that we've established within the last two to three years actually has the attention of -- strong attention of Commissioner Geesman. He's the chairman of the Technology Research Program Program Advisory Committee, which includes representation from the IOUs, the Department of Energy. It's a strong collaboration with the

DOE. And in fact, I'd say that we are driving the DOE program as much as they are complementing ours.

With respect to the biomass collaborative, it's involved with the Interagency Working Group, and it responds very strongly to the direction of Commissioner Boyd, who is our leader on that.

And then finally I put in the activities of the California Climate Change Center, which is supported by PIER, and for those of you who may have gone on the web site of the Climate Change Action Team report that last weekend, you may note that something like 19 or so reports were either authored by the members of the Climate Change Center or were co-authored by members from that center, and it was done almost on a moment's notice. So it's a real tribute to the quality as well as the responsiveness of this investment.

COMMISSIONER PEEVEY: Well, thank you very much. Are there questions here? This is really a very exhaustive set of materials and all. I think some of us probably want to ponder it a little bit. But other questions here? Secretary.

SECRETARY MC PEAK: Thank you, Mr. Chairman. It is, and I've had the benefit of having Martha's input before.

We are often asked at the cabinet level of the administration, how do we know that we've got the best thinking in the world on whatever the subject is. You know, it can be very, very daily things, something such as transportation to something like the very sophisticated energy research you're reviewing. So my question is, either

to you or Commissioner Geesman, and maybe you were beginning to give the answer: How is the PIER program peer-reviewed? How do we know that it is capturing the best thinking and how is the peer review of the PIER program institutionalized?

COMMISSIONER PEEVEY: Who wants to answer that? Commissioner Geesman.

COMMISSIONER GEESMAN: The legislature required that we establish an independent review panel of scientists from around the country to review the program's overall performance. Preceding that, each of the specific foci of the program had technical reviews that were done I think now in the fall of 2002 most recently, and then Martha has implemented a policy advisory committee for many of the areas that the program currently focuses on comprised of external experts. There's a real effort, and frankly, when the legislature has insisted upon it, that we continuously benchmark our work with work going on elsewhere in the world.

COMMISSIONER PEEVEY: Okay. Commissioner Grueneich.

COMMISSIONER GRUENEICH: Yes. I want to thank you very much, that R&D is an area that I long felt is very, very critical in the energy area because we just have to be making this investment. And I feel very fortunate that we have been provided with this funding.

And one of the things that has become apparent to me in the almost year that I've been a commissioner is that I think that there could be a better coordination between at least the Energy Commission and the PUC and possibly with the ISO, though I know, you know, there are a number of areas

where you're working, because I have found in at least a couple of instances where it seems that a report or a review has been done by the Energy Commission under the PIER program that is geared at then influencing what we at the PUC do.

And I'm always a believer of there's going to be more of a buy-in if the people who are tasked with implementing the recommendation actually have some involvement in the development of the recommendation, because I worry that the PIER program may be less effective and become, sometimes, certainly not always, my belief is that in many areas the PIER program really is the national standard if not international, but for the PUC, I just worry that we may have a situation where reports sit on the shelf essentially as opposed to really being bought into by our agency.

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And so one of the things that I'd like to volunteer to explore as the, I guess, the Energy Commission will be preparing the next five-year plan is ways that we at the PUC could be working to try to ensure that whatever are the results of your efforts are more fully utilized here.

And so that's something, I don't know if this is, if there's a history of PUC interacting with PIER, but if not and if it's felt that this would be of some use, I'm very interested in working in the R&D area.

COMMISSIONER PEEVEY: Thank you. Chairman Desmond.

CHAIRPERSON DESMOND: Just I wanted to respond. I
think it's a good suggestion. The challenge with R&D is

always how you take it from the lab and from the report and make it useful in the real world. And what you've hopefully

got is a sense of the tremendous amount of work and content that is available in forming decisions. In fact, it was the last time, I think, we were here when Susan Kennedy was asking about demand response. As I mentioned, we had spent \$10 million on statewide pricing pilot and a lot of other R&D on price elasticity and that that R&D ought to inform our policy development.

And so I'd recommend two things right away. One is all of these projects have project advisory committees, and the PUC staff, to the extent that they're interested in the subject matter, could certainly participate as a project advisory committee member. The second is to think about how to require the investor-owned utilities to incorporate the R&D research into the filings that they make as another way of making sure that the PUC is pulling that information through in the way of content. Those are two immediate things in addition to compared to any sort of automatic five-year investment plan.

COMMISSIONER PEEVEY: That's a good idea. Are there other questions or comments on this?

COMMISSIONER BOHN: Just one comment, one comment from someone who comes out of the private sector. The perfect is the enemy of the good, and I want to follow up on Secretary McPeak's comment. We can have the world's best science, and we won't get it to where it produces any benefit to California for a long enough time that it might somehow be then eclipsed by other science.

What's the balance that you're trying to draw

between stuff that's really good and you can get to application as distinguished from pure science? I get a little uneasy when you talk about the best science in the world and things like that, because there's a ton of that stuff out there, but our job is to get it in place and get it operating.

COMMISSIONER ROSENFELD: I guess I'd like to try to reassure you on that. We don't appear representing California try to compete, we try to collaborate, but we don't try to compete with the Department of Energy on the very frontiers.

Also we have an unwritten rule that -- two unwritten rules. One is that at least half of what we do is focused on end use and end use efficiency and demand response, which is certainly not the way the Department of Energy looks at things. So we're a good player in that, and we collaborate with a number of other states. We also put something like a third of our R&D into climate change and environmental things, which again is not what the Department of Energy does.

And the other thing we try to take into consideration very strongly is what are the needs of policy in California. That is, if you look at where PIER dollars go in energy efficiency, for example, you'll find that a lot of them go into R&D which is necessary for the next set of bidding standards or appliance standards of demand response.

And one thing I might say to Commissioner

Grueneich: It is a problem. We have our planning sessions

1 every year. We always invite somebody from the PUC. 2 don't necessarily always get somebody from the PUC. And I'm 3 overjoyed at the idea of tighter collaboration because a lot 4 of what we do really is influenced by knowing what the needs 5 of the Energy Commission are. And that's something that 6 happens by diffusion at the lunch table. And we need more 7 PUC --8 COMMISSIONER PEEVEY: Input. 9 COMMISSIONER ROSENFELD: -- input, right. 10 COMMISSIONER PEEVEY: Okay. Well, going forward we'll 11 try to make sure that happens. 12 Ms. Krebs, thank you very much for your 13 presentation here. 14 And we're significantly behind time here, which is 15 probably the fault of the chair here, but we next have a 16 brief report on the Energy Commission's 2005 IEPR and the 17 PUC's 2006 long-term procurement plans, Mr. Kennedy, Mr. 18 Kennedy, Kevin Kennedy, and Sean Gallagher. And then we'll 19 have a briefing on where we are on the solar program, the 20 Million Solar Roofs, and then we'll hear from the public, and 21 that will pretty much wrap it up for today. 22 You've agreed on a division of labor there? 23 MR. KENNEDY: Yes, we have. The division of labor is 24 essentially Sean has already said much of what needs to be 25 said about procurement. So it's all on my shoulders for this 26 round. 2.7 COMMISSIONER PEEVEY: Good going, Sean. 28 (Laughter)

COMMISSIONER PEEVEY: Bob and weave.

## STATEMENT OF MR. KENNEDY

MR. KENNEDY: I'm Kevin Kennedy. I was the program manager at the Energy Commission staff level for the 2004/2005 cycle of the Integrated Energy Policy Report, and I'm extremely pleased to be here reporting on the completion of that cycle.

For the Energy Report proceeding overall the basic requirements for the proceeding are laid out in the Public Resources Code. The basic purpose of the proceeding overall is to develop an integrated policy for the State for energy. Policy recommendations are expected to be made based on an in depth and integrated analysis of energy issues facing the state.

A second purpose is for the Energy Commission in this proceeding to the extent possible to develop a common information base for all of the energy agencies to use in the important decisions that they need to make. One of the directions that we had at the staff level from Commissioners Geesman and Boyd, the committee directing this proceeding, were to treat that expectation of developing a common information base that Energy Commission staff needed to deal with the other agencies as our clients to try to determine what it was that the other agencies needed in order to make sure that to the extent that we could we were able to develop information that would be both useful and used by other agencies. In terms of timing, the main report is expected to be adopted every other year, and we just adopted the 2005

report last month.

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The proceeding overall was a very extensive public proceeding. We worked in collaboration with various state, federal and local agencies. There were 59 days of committee hearings and workshops on a wide variety of topics. Over the course of the proceeding there are more than 30,000 pages of materials included in the Energy Report docket. We prepared more than 50 staff and consultant reports. Once we got to the point of the committee draft versions of the various reports that were adopted by the Commission, we received more than 100 comment letters on those committee draft reports. Those three reports were the 2005 Energy Report itself, the Strategic Transmission Investment Plan, and the Transmittal Report to the PUC, and all three of those were adopted at the November 21st business meeting and all are available on the Energy Commission web site along with most of the material from the proceeding.

I'm guessing that most of you have read fairly thoroughly the parts of the Energy Report and related materials that are of most interest to you. Rather than trying to capture in any way the findings and recommendations that were made, just include this one slide which highlights the key chapters that were addressed within the Energy Report itself. We dealt with transportation fuels, electricity needs and procurement policies, demand-side resources, distributed generation, and other supplies, transmission challenges, renewable resources, natural gas, water and energy integration, local climate change, and

California-Mexico border region energy issues.

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In addition to the Energy Report itself, the Public Resources Code calls on the Energy Commission to adopt a Transmission Strategic Plan. This is a requirement that was added fairly recently. The new section of the Public Resources Code calls on the Energy Commission to adopt the strategic plan for the electric transmission grid. This was a second report that was adopted by the Energy Commission at the November 21st meeting.

Another key thing that we were dealing with throughout the proceeding, as Sean mentioned when he was talking about the upcoming procurement proceeding, was trying to work very closely with the PUC in coordinating the 2005 Energy Report proceeding with the upcoming 2006 procurement proceeding here at the PUC. President Peevey issued an ACR in September of 2004 identifying the 2005 IEPR process as the forum for developing the range of need for the 2006 procurement proceeding, and that ACR was endorsed by the full PUC in last year's procurement decision. Further detail was laid out in a second ACR in March of 2005 that was also endorsed by the Energy Report Committee in an order that they issued at the same time.

The Transmittal Report, which is the third of the reports that were adopted on November 21st, is our attempt to provide to the PUC the recommendations for 2006 procurement and related proceeding, particularly focussing on the range of need for the three largest investor-owned utilities.

The overall Transmittal Report includes the

general procurement policy recommendations, walks through how we constructed the range of need, talks about the demand forecasts, how we reviewed those during the Energy Report proceeding and what we ended up adopting, the resource plans that were provided by the different utilities, and how we evaluated those, and identifies the range of need itself.

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In addition, there are chapters addressing the natural gas forecast and the transmission project recommendations. And with this point, we are essentially handing the Transmittal Report off to the PUC, who will be participating in the workshops that Sean mentioned Wednesday of this week. And we're looking forward to continuing to work with the PUC to try to ensure that the results of what we did in the 2005 Energy Report proceeding will be used and useful for the PUC in the procurement proceeding next year.

And unless Sean has anything to add, if any one has any questions.

COMMISSIONER PEEVEY: Sean, would you like to add something? You're not going to get off without saying anything.

MR. GALLAGHER: I'll say only that, as Kevin mentioned, we've worked closely with the Energy Commission staff on the development of the Transmittal Report. We spent a lot of time with them trying to ensure that it met what we perceived to be our needs. And so we expect to use it to the maximum extent feasible in the 2006 procurement proceeding. And I'm here for questions as well.

COMMISSIONER PEEVEY: Very good. Other questions or

comments on all this? No?

If not, thank you very much, both of you. And now we'll hear from Ms. Julie Fitch, the head of Strategic Planning at the PUC, on solar initiative.

## STATEMENT OF MS. FITCH

MS. FITCH: Good afternoon, every one. I'm actually joined by my colleague, Tim Tutt, from the Energy Commission. We're going to tag team this presentation. So bear with us. This was originally created for one person to do, but we're going to try to do it together. Also we completely balked at the orange template for the slides. So sorry, but ours is prettier.

What we're describing this afternoon is actually -- this is unusual in that we're giving you a preview of something that's going to be issued tomorrow. This proposal that we're discussing will be contained in a draft decision that's going to be issued tomorrow that will also have attached a joint staff report, joint CPUC and CEC staff report. This is the culmination of something that's been in the works for, as most of you know, about two years. This was originally titled the Million Solar Roofs initiative.

The legislature has had SB 1 under consideration for two years in a row. And in parallel with that, this past summer in June we actually were trying to stay current with what was going on in the legislature, and we actually issued a staff report in June that summarized our proposal at that time. And since the bill did not pass again this year, the

Governor actually asked President Peevey to see if we could implement what we can do as far as part of the solar initiative. And so this is the proposal to do that.

There are two things that we cannot do, I think at least two things, as a regulatory agency. One is the net metering provisions in law actually need legislative action, and the second one is we have no ability to require developers or builders to offer any solar. But other than those two things, this is our summary of the solar initiative.

What I'm going to do in the next two slides is just summarize two existing programs that were going to lead into the new solar initiative. The first is the PUC self-generation program. Most of you are familiar with this. This is a program that offers incentives for solar as well as wind and fuel cells and some gas-fired generation that's operating in combined heat and power mode to take advantage of efficiencies. This program offers incentives for solar projects that are greater than 30 kW in size, which means really commercial and industrial systems. There's been a budget of approximately 50 million a year since 2001, and at the moment we have about 50 megawatts of solar already installed and another 62 megawatts that's somewhere in the installation process and under construction.

The CEC in parallel with this has an existing program called the Emerging Renewables Program, which is funded out of public goods charge money and has been in place since 1998 therefore, and this funds primarily residential

systems. And we have approximately 62 megawatts installed since 1998. For both of these programs, the existing programs that the PUC and the CEC have collaborated in recent years, and our plan is to continue that. And Tim is going to describe in the next couple of slides the plan for two new program components, again, one centered at the CPUC and one centered at the CEC. Tim.

## STATEMENT OF MR. TUTT

MR. TUTT: Thank you, Julie. Good afternoon, Commissioners, Secretaries.

As Julie mentioned, the Emerging Renewables

Program is funded by the public goods charge, and the public goods charge cannot be increased without legislation. So consequently, to achieve the spirit of SB 1 in the coming years administratively as much as we can, much of the installations that previously had been funded at the Energy Commission will be shifted to a new CPUC program which will cover existing residential buildings, single family, multi-family, low income, as well as all nonresidential building construction, commercial, industrial, and agricultural facilities.

With that shift, the CEC program public goods charge funds can be concentrated on new residential buildings only, single-family homes, low-income and multi-family apartments. We will specifically target and work with the builder/developer community in this new program that we're developing at the CEC with the public goods charge funds, and we'll be coordinating with our transition into standards that

the CEC has been working on a solar option which will look at a higher compliance level for standards including solar and other energy efficiency measures as part of the 2008 standards.

And in order not to spring these two new programs on people and the stakeholders in the industry, we do perceive that 2006 is a transition year.

The administration initially for these programs will continue through the self-gen incentive program and emerging renewables program. The \$300 million that has been funded in previous decision or proposed decision for the self-gen program is part of that transition funding. And there is similar funding in ERP for transition for 2006.

The agencies will work on developing a new program structure in 2006, including a new program administrator structure for initially the residential retrofit market, which will be one of the new efforts primarily at the PUC. As I mentioned, the Energy Commission will be working on a new program focused on new construction, residential construction. We also will be working on moving towards a payment for system performance or performance-based incentive structure rather than an output-of-capacity-based structure, which is how the previous or the existing programs had primarily been structured.

And we feel it is important to develop marketing and outreach plans to achieve the significant goals of 3000 megawatts over ten years.

Turning back to Julie.

MS. FITCH: I am going to talk a little bit about the funding.

This slide shows what is expended -- it is intended to show the approximate budget that would be available in each year for rebates for solar.

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As Tim said, 2006 we consider to be a transition year. So it is actually 11 years worth of funding. Total amount, approximately 2.8 billion under the CPUC program, 400 million under the CEC one.

The actual spending in each year will vary depending on how many customers actually want to install solar and how many apply for rebates. So this is intended to be sort of the budget but not actual spending.

Another thing to note is that the CEC currently has authorization only for 2011. So this is not actually collections because basically the funding, the CEC is intending to spread the funding out over the 10-year period even though the collections would occur in a smaller number of years.

It is possible also that the Legislature would extend the public goods charge funding, in which case there will be additional funding for that market segment.

Another thing to note about this slide is that we are proposing to collect more money in early years and sort of ramp down over the 10-year period. There's two main reasons for that. One is it maximizes our flexibilities if we have more funds collected in case there is more program up-take in the early years. The second reason is because, as

you will see on the next slide, we are proposing to have the rebates decline over a period of time so that initially the rebate amounts will be more and therefore the budget amounts would likely be more as well.

So the next slide shows the rebate levels as well as the plant installations. This is for the CPUC component. I imagine there would be a similar slide for the CEC component except it would have smaller amounts associated with it.

But the blue line is the rebate level that we would propose to adjust on an annual basis or we could potentially adjust it when we meet the megawatt targets, which are in the red blocks on the graph.

So the total anticipated installation would be 2600 megawatts from this program. And that's if we are successful.

So the idea is to decline the rebate amounts over time in an orderly fashion so that we can support what we hope is a self-sustaining market by the industry ultimately.

The next slide just describes what we would fund initially. What we are proposing is to just start out by funding photovoltaics in rooftop installations on the customer's side of the meter between 1 kilowatt and 1 megawatt in size. This corresponds to the net metering cap that is currently in place, the size cap.

We would also in 2006 during our transition year work on developing incentive levels to fund a whole host of additional technologies that are solar oriented, including

solar hot water heating, solar heating and cooling, which is a new technology, which could be very useful, and also concentrating solar or solar thermal electric technologies in DG configurations.

But this is not for the types of concentrated solar projects like in the Mohave desert that have been announced recently.

Finally, Tim is going to talk about our efficiency and low income provisions.

MR. TUTT: We intend in our new programs to have a strong coordination to energy efficiency efforts in the state. So for the existing facilities that want to install solar, we are expecting to require that energy efficiency audits be included in the transaction so that the customers that are installing solar have some concept of the degree of energy efficiency that could be included in the project that is necessary in their existing homes and businesses.

And for new construction applications, although new buildings are already fairly efficient in California because of our strong standards in the state, we anticipate requiring that new construction applications participate in the utility energy efficiency programs for new construction that tend to go beyond the standards.

Our intent is to have a level of efficiency beyond the standards as a part and parcel of the solar programs that we are developing on the new construction sector.

We also expect to connect and coordinate strongly with the advanced meters and time varying rates proceedings

at the Public Utilities Commission so that the solar systems are part of the new world where advanced meters can help monitor and understand exactly how solar systems are being included and helpful to the system as a whole and the rates are appropriate for these installations.

And finally, but not by any means the least, we do recognize that there's a real need for our less advantaged customers in the state to be included in this program. So we intend to set aside 10 percent of the funding for low income and affordable housing projects.

Both single family and multifamily structures, both existing and new, will be eligible to participate in this set aside for low-income customers or affordable housing customers. And we will consider setting different incentive levels to make the program work for these customers.

Both agencies will also explore the option of offering low-cost financing for this sector and perhaps even for other existing customers as we move forward. And particularly with performance-based estimates it may be necessary to include a stronger financing component.

One last point, and that is a legislative point.

Another thing we cannot do administratively at this point is require participation of the municipal utilities, the customer-owned utilities, in the state in this program.

We do intend at the Energy Commission to work as cooperatively as we can on the new construction programs.

Some of the fast growing areas of the state that are located in those customer-owned utility services will

hopefully establish and participate in a coordinated fashion with our solar initiative.

Thank you.

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COMMISSIONER PEEVEY: Thank you very much.

Before there are any questions, let me just say I want to personally thank my former energy advisor and now head of strategic planning Julie Fitch and Tim Tutt at the Energy Commission and Jacky Pfannenstiel for working, all of us working, and Joe Desmond, all of us working so closely on this program which is now being unveiled here and will be on our website and out in the mail I guess tomorrow, right, the 13th, so that it can be adopted by the Commission on January 12th.

Now we are going ahead with the funding of this program on the 15th of this month, three days from now.

Jacky, do you have anything to add?

VICE CHAIRPERSON PFANNENSTIEL: I think that what we are trying to do here is take the existing programs, keep them going, but focus them where we have the greatest opportunity to have an impact. I think the PUC program is combining the best features of the two programs that are going on now. I am quite excited about the idea of this new Energy Commission program which is really targeted on what I think is going to be the biggest bang for the buck that we are going to spend in solar.

We are going to focus on new homes, as Secretary McPeak reminds us, 200,000 new homes being built in California each year, that are largely in high air

conditioning load places of the state where solar makes the most sense.

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The Energy Commission has a lot of experience working with developers through the energy efficiency standards that we have had for a number of years. So we want to work with the developers to make solar one of the key market points on these new homes.

So when you tie that back with energy efficiency, not only the higher levels of energy efficiency in the regular standards, but going beyond the standards to even greater levels of energy efficiency with, of course, advanced meters, I think you have a package for new homes in California that I think will keep from driving that increasing air conditioning peak that we are all dealing with.

So I think that the work that Tim and Julie have done putting this together in a short period of time has been just remarkable.

COMMISSIONER PEEVEY: Thank you very much.

Other questions and comments on this.

Mr. Desmond.

CHAIRPERSON DESMOND: Just a few.

I want to commend the staff, President Peevey and Commissioner Pfannenstiel for really taking a step back and saying how do we construct and design a program that works in the best interests of Californians. I think that you have done it here.

Second, I also think you have a proposal that is

flexible enough that should the Legislature take up the issue of builder mandates and net metering, that it will fit very well and dovetail right into what you put together here. So in that sense it has been designed to be complementary of things that the Legislature would still need to do. I know there is interest there in looking at that.

And then two final thoughts here. One is to ensure that the meter data from those advanced meters is available to the Commission, PUC and the CEC for measurement and verification as well as our research and development purposes. We are going to want to know early on how this is performing. So that ought to be a condition, is that we have use of that information for our purposes.

Lastly, as we think about how to put the rules in place for participation, that we really design it so it is as easy as possible for customers to participate and not to overly complicate it in the interest of data adequacy but, rather, make sure customers can fully take advantage of it in an expeditious way. And there is a lot of good lessons we learned by the way the rebate programs are run, and I think they could be applied here. So I want to thank everyone for the hard work.

COMMISSIONER PEEVEY: Thank you.

Commissioner Grueneich.

COMMISSIONER GRUENEICH: I want to commend everyone as well. I am very, very pleased to see that the low income component is included. When we were first starting to think about it, that was an area that I specifically requested be

1 included.

I am the assigned Commissioner at the PUC on low income issues, and after today's announcement I assume that there will be question for the low income portion specifically on when will the program actually roll out so that a low-income resident could apply for the funds.

Do we have any sense? Mid 2006 by the time we got that particular part of the program designed?

MS. FITCH: I would say mid 2006 is our goal, but at the latest it would be 2007.

COMMISSIONER GRUENEICH: I strongly urge that to the extent we are going to be rolling out portions of the program in 2006, if you can try to keep the low income part of that, that would be very appropriate.

MR. TUTT: May I just add, Commissioner Grueneich, that low-income customers do participate in our current emerging renewables program and will be able to do so in 2006 until the new program is unveiled.

COMMISSIONER PEEVEY: Other questions or comments?

SECRETARY MC PEAK: I think what I just heard is that there may be something that will be done in 2006. And to the extent that there can be any demonstration of the program of a phased roll-out while there may be some policy discussion during 2006, that would be very, very helpful.

COMMISSIONER PEEVEY: Okay. Thank you both very much and for all the time and effort you put into this.

We now turn to the phase where we have three people that would like to address this joint meeting. The

first is Andrew Michael, the Bay Area Council. 1 2. Mr. Michael. 3 You will be followed by Marcel Hawiger of TURN and 4 Chris Mayer of the Modesto Irrigation District. 5 STATEMENT OF MR. MICHAEL 6 MR. MICHAEL: Mr. President, Commissioners, Secretary, 7 my name is Andrew Michael with the Bay Area Council. 8 As you may know, the Bay Area Council represents 9 275 of the largest employers and businesses in the 10 nine-county Bay Area. 11 We have great concern over energy issues and the 12 pricing of energy and have a great deal of interest in the 13 number of the issues that we are talking about today. 14 The Bay Area Council has an energy committee, and 15 it is composed of a number of industry leaders from the 16 health industry, information technology, biotech, 17 manufacturing and also energy providers. 18 Earlier this year the Bay Area -- late last year 19 the Bay Area Council recognized the importance of energy and 20 set up eight principles that we are really working toward. 21 One is to assure adequate energy reserves through long term 22 planning and procurement. Two is to promote low-income costs Three is to align 23 through competitive wholesale procurement. 24 utility rates and cost allocation to be equitably based on

Four is to provide retail choice for California businesses. Six is to encourage energy supply from cost competitive renewable energy resources and alternative fuels

the cost of service to the user.

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that reduce impact on the environment. And next is to upgrade and expand the transmission line capacity to provide added security and capacity to receive energy from new and existing sources. And lastly is to promote aggressive conservation and demand management through financial incentives to customers as well as through volunteer efforts.

Over the past year we have had the pleasure of having a number of you present to our Commission. John Gallagher came earlier, as well as Chair Mr. Joe Desmond, California Commissioner, and also John Geesman came recently. And we have had Assemblymember Richmonds, chief of staff, speak to us as well as Assemblymember Levine.

What we wanted to really stress today is really three things. One, we appreciate your acknowledging and using the integrated energy policy report. We think that is a great addition in terms of how the state addresses energy supply and other matters.

Number two, you described in the beginning the next phase on long term procurement. We really ask that that be acted on swiftly. Even if you could go faster, that would be better.

Based on the time frames needed for siting and then actually building and getting new production on line, as we saw in 2007, there may be some challenges there. So the faster, the better.

And secondly, and very much related to that, is we really need the California state to really make a clear distinction and approach to the kind of market structure we

want. It is still muddled after our crisis in 2001. We really ask the question are we moving away from hybrid model toward a more competitive wholesale energy market or not? And if we are, can you make that clear, partly through the long term procurement process that you are engaged in, can you make it clear so that it is a competitive market for potential new energy suppliers in the way that costs are allocated for that.

And so we ask you to move quickly and rapidly on that.

The next point is that businesses, a number of large businesses, really think it is important to bring back direct access for retail customers. And we hope that that will also move forward more rapidly than it has.

And finally, in terms of resource adequacy, we applaud the steps that have been taken, but there are some improvements that still need to be added in there, especially to make sure that existing power plants, as well as others that may come on line, are adequately compensated for their production.

So we thank you for your continued work, and we look forward to rapid implementation of these things. And the last comments I want to make is also that we are also very much in favor of promoting more rapid use of net metering and advanced metering.

In terms of the load mix that you have as priorities, I think the idea of really linking the net metering to some of the renewable resources like solar is an

1 important thing, as we have seen from other places around the 2. world, Germany especially, Japan, where you actually give a 3 sort of guaranteed level of compensation for that energy, and 4 you get better results and reduce the costs of that 5 implementation. 6 Thank you. 7 I just had a question. COMMISSIONER BROWN: I was 8 speaking with a utility executive the other day, and he gave 9 me an indication that private customers were moving back --10 those existing direct access customers -- were moving back to 11 the utilities. Do you see any evidence of that? 12 MR. MICHAEL: We have heard that from some of our 13 members. A lot of it being in a way the disincentive that 14 continues to be added on to the direct access customers. COMMISSIONER BROWN: You mean the cost responsibility 15 16 surcharge? 17 MR. MICHAEL: Yes. 18 COMMISSIONER BROWN: Okav. 19 COMMISSIONER PEEVEY: Thank you very much. 20 Next is Marcel Hawiger. 21 STATEMENT OF MR. HAWIGER 22 Thank you very much, President Peevey. MR. HAWIGER: 23 Good afternoon, Secretary McPeak, Secretary Chrisman and 24 Honorable Commissioners of the PUC and Energy Commission. 25 I came here primarily wearing my natural gas hat, 26 though I will probably touch upon demand response just so you 2.7 all will stay awake.

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Let me first commend the Public Utilities

Commission for very rapidly acting on several packages to help ameliorate the natural gas price exorbitant levels. TURN very much appreciated the Commission acted to improve the CARE program, to implement PG&E's 10/20 program, to authorize hedging activities and SoCalGas' storage project. And we supported all of those actions.

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We also appreciate that the Commission is moving, continuing to move forward on its commitment to accelerating renewables through the potential program just unveiled today. We filed comments supporting an increase in the funding for the self-generation incentive program. And we appreciate movement to accelerate RPS standard.

Despite that, I do want to make one criticism, and it may be minor, but we were extremely disappointed the Commission did not act to take -- missed a cost opportunity to enact a program that would have provided the greater benefit for natural gas customers. And I want to explain this not just to beat up on the PUC, even though that is a favorite pastime, but today I have a broken foot and I am afraid if President Peevey comes after me I can't run away. So I actually want to mention this because I do have a couple of constructive suggestions I hope that come out of it.

PG&E and TURN both proposed basically a deferral program, a rate deferral program, that would have capped rate increases for natural gas and moved the annual revenue collections to the summer months. PG&E agreed that they could do this financially and defer collection until the summer months. But the Commission rejected this program,

though it did adopt the conservation 10/20 program. But the revenue deferral program would have probably made the most difference to all natural gas customers by limiting large rate increases.

And the Commission rejected it because basically two reasons. The first, it said the Commission was concerned, the Public Utilities Commission, was concerned about the impact on summer bills. Now that is a little hard to understand because summer bills for natural gas are always low. Even if prices stay the same, people don't use natural gas in the summer. And PG&E provided a lot of data and comments showing that by reducing bills in the winter, December through March, by between ten and \$20 a month, when the bills are all over a hundred dollars every month for their average customer, in the summer you collect over the June through October an additional \$10 or less, bills are always below \$50. So I was a little perplexed by that explanation.

But secondly, the Commission said that they are concerned about sending the wrong price signal for conservation. Well, first of all, gas prices have already doubled since 2003. The proposal would have basically ameliorated the hike that came out of the hurricane impacts. But more importantly, when I talked to people -- and I urge you to talk to any person you know, aside maybe from Borenstein and Wolack, I admit they have a different view -- but those people are concerned about their monthly gas bill. They don't necessarily look at the per therm rate for better

or for worse. And they know that their winter bills are going to be -- a lot of them know they are going to be very high. But that is what they are concerned about.

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And frankly, it seems to me totally inconsistent for the Commission to be concerned about the per therm price signal when at the same time it is pushing the utilities on the gas side to promote the level payment plan.

The level payment plan allows customers to pay the same amount each month. In fact, TURN has not, while we supported it, we never pushed the level payment plan precisely because we do think it sends the wrong conservation signal because we think that those high monthly bills are what causes people in the winter to try to reduce their natural gas use.

But I do think there is one or two recommendations that I would draw from this. And one is that we can do more with monthly bills to promote conservation. And I think this applies to both gas and electric.

Secretary McPeak mentioned that we are still installing dumb meters. And I would -- TURN fully supports putting in smart meters as well as perhaps solar in new construction. That is a totally cost effective sensible thing to do. The question is do you go ahead and retrofit those millions of dumb, dependable and dirt cheap meters that are already out there. And I would say that we can probably promote conservation by doing more with what we have because I do not believe that smart meters will make smart customers. I think smart customers require information and ability to

reduce in order to conserve.

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For example, the current PG&E bill tells you how much you use each month and then tells you how many kilowatt-hours or therms you used the same month last year. Now that is pretty interesting. But it doesn't really -- it helps tell you how you were acting compared to a year ago. I am not sure people will necessarily remember exactly what they did a year ago that made things different.

A simple idea: What if PG&E provided a histogram or chart of monthly use in each bill. Now that might make people realize first of all on the electric side that they use a lot more in the summer. On the gas side they probably already know they use it in the winter. But that is a little clearer.

It might promote some conservation. I am not sure. It is just an idea. I say it because next month the executive director is supposed to recommend to the Public Utilities Commission whether to open a rulemaking on making bill formats more customer friendly.

I think that there are things to do to make it more customer friendly and at the same time to make better use of existing data to promote conservation.

Now the last thing I will say is that obviously for TURN it does come down to an issue of cost effectiveness, and we hope the Commission looks at that in all cases. If PG&E turns around and tells me that it will cost \$500 million to change Cordaptics to give better information to customers but they could go ahead and put in meters on everybody and

charge us less than that because of the benefits, I will walk away and I will shut up. But I do hope that the Commission looks at that and considers ways to use monthly data on bills because people do care about monthly bills.

Thank you very much.

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COMMISSIONER PEEVEY: Thank you, Mr. Hawiger.

The next is Chris Mayer, MID.

## STATEMENT OF MR. MAYER

MR. MAYER: Thank you very much. My comments will be very short.

During the discussion of demand response,

Secretary McPeak had an observation that there may be a few
more demand response programs floating around within
municipal utilities. Modesto Irrigation District, our
board's policy is that 5 percent of our peak load will be
maintained in demand response activities. And our peak was
about 632 megawatts this year.

We have an air conditioner control program called STEP. Shave the Energy Peak is the acronym. This program was founded in the early 1980s, and at the time got a lot of help from PG&E because they had some programs in the San Ramon area. We maintain this program in place now continuously since that time.

We have up to 14,000 participating customers. And that program will take out about 12 megawatts at the time of our peak. And the nice thing about the program is the hotter it is, the more demand relief we get from air conditioning cycling program.

So that is the reason for some of those ranges you saw earlier. At lower temperatures you get less response, but of course at higher temperatures where you need the response you get stronger response.

We also have an industrial interruptible program with about 22 megawatts of participation. So adding those two together we have about 34 megawatts. And it is a little over 5 percent of our peak.

Now we do report our demand response each year to both state and federal agencies. So we will follow through and make sure to see how that wasn't picked up on the report.

But again, we have had these programs for a long time. They really are important for us. We do have very hot weather in our service territories. And it is much more efficient to meet some of this load with demand than it is to build additional peaking facilities.

Thank you.

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COMMISSIONER PEEVEY: Thank you. I am sure the CEC will personally talk to you.

We do have two more speakers. Juliette Anthony.

STATEMENT OF MS. ANTHONY

MS. ANTHONY: Good afternoon. I am Juliette Anthony from Sun Power and Geothermal Energy in San Rafael, and many thanks to the Commission, all the Commissioners and the Secretary, for implementing this program. We are thrilled.

What I do want to say is I would like to urge you to go as quickly as possible to performance-based incentives.

I am a member of Americans for Solar Power which has spent

months preparing the document that we submitted, because Americans for Solar Power believe in accountability and oversight. You are giving a very generous grant to our industry and all the solar technologies, and we want to be truly responsible.

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I will explain to you that with the capacity-based rebates that we have now you are paying for solar panels that go in. You are not paying for the power produced. A flat system will in fact produce about 20 percent less than a system that is based on performance. And a flat system will not meet peak demand.

If you have a system that is based on performance, put in west or southwest, you will be meeting the peak demand in the late afternoon, which is exactly what we need to avoid building more peaker plants.

So I urge you to move as quickly as possible.

The second thing is we have a panel shortage.

When panels are not produced -- put in for performance, you have to use more percentage panels to produce the same result of energy.

I want to also urge you to put performance-based in with the new home construction. And the reason I say that is that in the hot territories, PV works less efficiently than it does in the cool territories, but solar hot water works extraordinarily well. And that's part of our program. And solar thermal electric works extremely well. So if you balance where the construction is going and you're careful to use the proper technology, we will get the best bang for the

1 buck.

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And solar hot water -- you can put in a solar hot water system for about 5- to \$6,000, and eliminate a great usage of natural gas. And I know this may sound strange for a PV installer to be telling you about, but we care in Americans for Solar Power about all solar installations.

And another thing is Bill Brooks, who is well known in the industry, has shown that building integrated technology with new homes in a hot area can produce 18 percent less power than if it's put in a cooler temperature.

So I urge you to be very careful about what technologies are going in. And that whole problem will be obviated if you put in performance-based incentives.

Thank you so much. And we're very grateful to you.

COMMISSIONER PEEVEY: Thank you.

The last speaker, Jane Turnbull.

MS. TURNBULL: Good afternoon, Commissioners and Secretaries. I am Jane Turnbull, from the League of Women Voters in California.

My comment is very brief. I particularly want to note that the League has supported the IEPR process this year. We think this is an extremely fine process. It's been well run by the two Commissioners and the staff. Support has been great. The outcome -- the output has been comprehensive and timely.

With that in mind, we would like to make a comment

in terms of the PUC process. We think that the PUC has begun to move in the right direction over the last years by making more inclusive rulemakings. However, those rulemakings, while they may be more comprehensive, have not necessarily been more timely. We would urge the PUC to take a look at its current process, to see if there are ways that it can adopt a workshop-type format on more occasions, and make the proceedings more timely.

One other comment I'd like to make. I'd like to commend the previous speaker for her comments. The League has supported performance-based rates across the board. We did not support S.B. 1 as a Bill, though the new proposal looks as though it is leading our very real concerns about the other components of the total program, but we certainly would like performance-based rates to be considered as an aspect.

Thank you.

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COMMISSIONER PEEVEY: Thank you very much.

Is there anyone else who would like -- in the auditorium here would like to come forward to say anything to us assembled here?

If not, we're about at the end of our -- the day.

Are there any Commissioners or Secretaries who would like to add any final words? Comments?

Commissioner Brown.

COMMISSIONER BROWN: Yes. I just have one reflection on listening to the speakers. And that is that the -- I think that we have to move toward greater coordination with

the munis.

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I think this idea of a fragmented energy system -not only whether it's transmission, but energy planning -- is
not healthy. And that we need -- it's one state. We're not
islands of jurisdiction. And I know that it steps on an
awful lot of toes to talk about integrating the munis into
the state planning, but I think as we approach a tighter and
tighter energy system, and the need for a greater energy
efficiencies, the unity of the programs really must be sought
out.

COMMISSIONER PEEVEY: Thank you.

Anyone else?

Joe Desmond.

CHAIRPERSON DESMOND: I just wanted to first thank the staff for the hard work putting all this information together, as well as Commissioners Geesman and Boyd, who sat through the process, which is a significant part of this process.

Once again, lastly, just the general observation that the State continues to make positive progress towards bringing regulatory certainty in cost recovery resource adequacy. And, even looking at the summer outlook, 2006 is better than 2005, which is an improvement over where we were in 2004. So I think all the signs are that we continue to go forward in the right direction.

I look forward to these continued forums in the future.

COMMISSIONER PEEVEY: Thank you very much.

1	Well, this meeting will conclude.
2	And the next joint meeting of the various agencies
3	will be undoubtedly in Sacramento in the March/April time
4	frame.
5	Thank you all very much for coming here, and all
6	my colleagues, too.
7	(Whereupon, at the hour of 4:12 p.m., this matter was adjourned.)
8	matter was adjourned.
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